Journal of EDUCATIONAL METHOD

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Progressive Public Schools

Volume VIII JANUARY, 1929 Number 4

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EDUCATIONAL METHOD

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The Journal of Educational Method

VOLUME VIII JANUARY, 1929 NUMBER 4

EDITORIALLY SPEAKING

WHERE CAN PROGRESS BE FOUND?

No doubt many of our readers have noticed the new front cover arrangement of this journal—the shortened title and added sub-title. The change merely recognizes the facts. After some years the school public has at last come to recognize that the term "educational method" means something more than "technique of the recitation." Just as research is a function by no means limited to school psychologists, so method is a concept by no means properly limited to the work of the classroom teacher. The term is generic and the educational philosophy associated with it should be consistently applied to all aspects of social control in education. To set up or apply one set of principles in the field of teaching and hold to contradictory principles in administration and supervision is not merely inconsistent, it is destructive and wasteful. Slighter differences in maturity between the leader and the led do not justify a complete shift in point of view. One phase of progress in current educational practice is reflected in the growing recognition of this fact.

This and other phases of progress are not confined to so-called private schools. Taken as a group, these schools appear to exhibit a greater range from extreme conservatism to extreme progressivism, not to say radicalism. Nevertheless, a careful reading of recent inventories of the purposes that are said to actuate the more progressive private schools fails to discover any to which the like group of public school leaders do not subscribe or have not professed. The actual performances are not so easily verified. In the absence of proof to the contrary, and in view of an abundance of evidence in support, we venture to say that the best of the public schools are fully abreast of the better private schools in the application of progressive principles.

This statement is not to be taken as derogatory in the slightest degree of the distinguished service that many schools under private management are rendering. They are not only offering a better opportunity than was formerly available to their patrons, they are setting an excellent example and developing programs highly suggestive to schools everywhere. But the impression that experimentation and break with tradition are not possible in schools supported by public taxation, which seems to be taken for granted in some quarters, is far from the truth. Many of the very best schools now to be found are public schools.

It is the cherished ambition of the edi-

tors of EDUCATIONAL METHOD to serve these schools in the future as it has in the past, by providing a clearing house of practical experience, through which one school may share the results of its efforts for improvement with others. The new sub-title merely recognizes explicitly a state of affairs hitherto largely taken for granted.

THE NEW DEPARTMENT

The evolution of the National Conference on Educational Method into a major department of the National Education Association, now nearing conclusion, exemplifies a significant tendency. Founded in 1921 as a medium for the discussion and dissemination of modern principles of method, the society has gradually become an organization devoted to the interests of those concerned mainly or primarily with supervision of teaching. This fact was recognized at the last annual meeting, held in Boston and Cambridge, at which the constitution was amended so as to substitute for the original title that of National Conference of Supervisors and Directors of Instruction. At this meeting also a resolution was adopted directing the Executive Committee of the Conference to apply to the National Education Association for membership as a department of that body. A petition with nearly four hundred signatures was presented and accepted. Except for certain formalities, the transformation of the Conference into a constituent member of the inclusive national society of workers in public education was thus completed.

More and more educational organization tends to focus upon particular offices and functions. While there remains a place for societies concerned with general, all-embracing interests and problems, the tendency to center upon specific duties—or organize around the job—is undoubtedly salutary. The test of general conclusions is in their application, and application requires technique.

The number of supervisors now actively at work in the country is large. Delimitation of their functions and relations is now taking place. There is a rapidly growing literature in this field. The new department has every prospect of serving a numerous and important constituency. It welcomes to its membership and to active participation in its work all who are interested in its purposes. These are clearly set forth in the new constitution of the department, which is printed in full elsewhere in these columns.

EDUCATIONAL METHOD will continue to be the official organ of the society. Supervision touches every phase of the educational activities of the schools. It must also at times concern itself with some of the material conditions that make good teaching as well as good supervision possible. Within its field, EDUCATIONAL METHOD will seek to further every effort that gives promise of better schools.

J. F. H.

SCHOOL ASSEMBLIES AND CLUBS

FAY M. BANTA
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Two activities that are often neglected in the elementary schools are the school assembly and the school club.

I. THE SCHOOL ASSEMBLY

Colonel Parker felt that a very important time of the day was the morning exercise time. He had the entire school assemble every morning. Although to us it seems an impossible thing to manage, it must have been a most impressive sight to see every member of the Cook County Normal School assembled for ten-minute exercises before school every morning. They were all there, from the members of the kindergarten to the members of the faculty—the latter on the platform. There are few if any such personalities in the schools today as Colonel Parker, so such gatherings as these are impossible, but every room should have ten-minute exercises at the beginning of the morning session to give tone and spirit to the work done the rest of the day.

It is not practical to have the joint assembly oftener than twice a week, but we must appreciate more fully the value of such exercises. The interest aroused by these gatherings has in some cases been the means of eliminating tardiness and of arousing school spirit.

Often a great difficulty to be overcome is the lack of a large assembly hall. It is always possible, however, for several classes to crowd into one room and the inconvenience is overbalanced by the good results. In the fine weather of fall and spring, outdoor gatherings may be made effective. On special occasions, such as Washington's and Lincoln's birthdays, Christmas, and Thanksgiving, there should always be some arrangement made for a joint assembly, even if all the children have to stand. In that event, the program will have to be short. Putting up with any inconvenience, however, is better than not having all, at times, and frequently part of the school meeting together.

The importance of the assembly cannot be overestimated. It is the most important factor in unifying the school. There is great danger, however, that there will be mismanagement and misuse. If the program is a dry, ceremonial, listless routine, or a too religious affair, there will be at the best just polite attention on the part of the pupils. There must be an element of surprise—monotony ruins everything. The assembly is never a time for scolding, fault-finding, or sermonizing. It is not a time for announcements, but if it is necessary to make any, do it expeditiously. The assembly can aid in the intelligent formation of public opinion in all things that affect the school. The policy of the building can be made known through the programs.

Only by wide participation can a sense of unity be developed. The pupils are citizens of the school in just the same way that they are later going to be citizens of the community. They should be given the idea that it is a privilege rather than a duty for any class, club, or group of individuals to present an assembly program. This should be made comparable to their participation in public life later on.

Outside speakers should only be brought in if their contributions are consistent with the work that is going on in the school, or if it gives new impetus.

As the school has changed into a social organization and we have come to know that it is what the learner does and not what he is told that educates him, there has come a change in the assembly. Change does not always mean progress. We must be prepared for rather chaotic conditions to prevail at the very beginning. Pupils and teachers will have to adjust themselves to the change. All good things work slowly. There must be preparation and enthusiasm on the part of the principal to get the idea over to the teachers in such a way as to obtain the best results.

Programs participated in by pupils should grow out of regular or extra-class activities. They should widen and deepen the interests of the pupils. There should be a variety of type. Booster or "pep" meetings should be held at the beginning of the term. Frequent musical assemblies make it possible for more pupils to participate than any other kind. The aim in all programs is social and educational. Exercises by the pupils should have an element of instruction in them, and when they are an outgrowth of the classroom work they will be both entertaining and instructive. They should be short enough to hold the attention of the pupils.

When the children know that the assembly program is to be a natural outgrowth of some part of the regular work of the school, an added impetus is given to their classroom work. Very little time should be given to special preparation of the program and there should be nothing about it to remind one of the old-fashioned "pieces." Care should be taken to throw the responsibility of the planning and staging upon the pupils of the grade giving the performance. Those who do not actually appear can be responsible for the setting and mechanical arrangements.

There need be no difficulty on account of the wide range of ages of children assembled. The pupils should be impressed with the fact that their program must be arranged so that it will appeal to all ages and be understood by all those assembled.

Assemblies of this kind furnish real and vital motives for work in dramatization, composition both oral and written, and any school subject that has made an appeal to the children. In the yearbook published by the Colonel Parker School at Chicago, there is a most interesting account of a school assembly that was the outgrowth of a visit of a third grade to the Dunes.

As a result of these exercises, the pupils feel at ease when talking, learn to express themselves clearly and freely, and develop a sense of responsibility for the instruction and entertainment of an audience.

The principal, however, must talk occasionally in order to get a firm grasp on the school. These talks must be well planned. There should be much preparation so that the principal will win the admiration of the school by the way in which the assembly is conducted. He must be vitally interested in his subject, and so enthusiastic that there is no hesitancy nor weakness in the presentation. To have an exaggerated sense of one's own importance, to be stern or severe, fault-finding, or lacking in a sense of humor is to court disaster. Once good relations have been established, heart-to-heart talks to pupils can be made the strongest disciplinary agents in the school. Talk directly to the pupils in a clear, forceful, good-natured way. Make these talks constructive, appeal to the positive, and be appreciative of any efforts on the part of the pupils for past activities. Have clearly in mind what is to be accomplished and the means that you want the pupils to use. Be very concrete and talk in terms that the

pupils will understand. A principal can change the entire attitude of the school and materially improve conditions with this kind of an assembly.

When managed and used in the right way, the school assembly is the great device for developing coöperation and producing and maintaining a spirit of unity in a building. It is genuinely entertaining and educative to those who participate and to the audience as well.

There should be very little time given to special preparation, because the program should really be an outgrowth of class activities. A few typical assembly programs from actual classroom experiences follow:

I

Elbert Hubbard's *Little Journeys* gave the idea for the pupils of a seventh grade to make trips to find out what was interesting in their community. This became so absorbing that an assembly program grew out of it with such topics as: "My Friend Who Has Lived in This Community Forty-Two Years"; "Why I Am Interested in the Two Oaks in Our School Yard" (her father had planted them); "Go with the Table Tops from the Marietta Glass Company and See the United States" (two boys told of their visit to a factory and the wide shipment of products therefrom); "Men Who Can Dress in Two Minutes" (boys' report of a visit to the fire station); "A Houseful of Birds" (account by two girls of a visit to a home where the woman raised canaries); "Rivers of Milk" (visit to a milk plant).

II

The foreign children of a school had been encouraged to talk by getting them to bring something to school that either they or their parents had brought from their native country. They, of course, were the only ones who could tell all about the article they had brought. As a result, a Russian samovar and icon, along with an Italian head-dress, old gold necklace, and an heirloom picture of the Holy Family were talked about.

III

A fourth grade gave a Hygiene program. They had written an original play wherein Vegetable and Milk protested vigorously to the king, because Sweets had usurped their places with the children. A trial was staged and Sweets was told emphatically just where his place was and was pledged to keep it.

IV

A fifth grade, as a result of the study of Europe, put on a program of folk dances. Dances of Italy, Spain, Russia, Sweden, Denmark, Ireland, Scotland, and France were given. This was a good program to bring in many participants, because with the exception of the Highland Fling and Irish Jig, they were group dances. The children decided that in order to make this program instructive as well as entertaining, they must have a map large enough for all to see, and point out each country represented, and tell a bit about it. This proved a rather elaborate program and took more than the customary amount of time. Some of these dances are used as low as the first grade, so there is no difficulty in adapting them to the grade.

V

A program along the same line as the above was one in which folk songs of the various countries were given. The names of composer, poet, and country were announced. This program was given by the eighth grade music class, and was planned so that there was a chance for mass singing, although some of the songs were given by the quartet and glee club. Others were sung by the entire department chorus, and other children who knew the song chimed in.

VI

A civic program was given to make the pupils see that the school is theirs and to show them how foolish it is to destroy their own property. It was an original play. The first scene showed men at the window paying their taxes. There was much conversation, of course, about school buildings, their beauty, convenience and great cost, but they—the fathers—were glad to pay

for them, because they belonged to the children. The next scene was a series of flashes. The first was that of a boy busily carving his name on a desk; the next, that of a girl going nonchalantly down the hall holding a pencil so that it marked the wall; the third, that of a group of children getting books from a bookcase (so that it would be very apparent that the books were school property) and then proceeding to blot them, tear the pages, etc., one boy going to the extreme of sitting on his book when it was open. The third scene showed a supper table with the father telling of his trip to the Court House that day. His opening remark was, "Well, children, I paid our share on the new school building today. You ought to be mighty proud to have part ownership in a fine building like that!"

VII

A program on etiquette was given—that part which has to do with introductions. This Junior High School teacher had made this so much a part of her work for years that the children were accustomed to it and there was not the slightest evidence of timidity or self-consciousness. It was all dramatized, of course, with an "announcer." There were such episodes as: "You are walking with your father and meet your teacher. How would you introduce them?"; "You bring a new girl friend home. Do you introduce her to your mother or your mother to her?"; "Your cousin has come to visit you. How do you make him acquainted with your pals?" (boys, of course); "Your mother comes to school for the first time. You want her to meet your teacher and your principal. What is a good way to do this?"

VIII

A program greatly like the above was on "Courtesy." Such things as showing strangers about the building, common politeness—both girls and boys—respect for elders, etc., were shown.

IX

The traffic officers and the first grade combined to put on an assembly that made "Safety First" something that was to be practiced. At a regular meeting of the traffic squad, they decided what was of greatest importance and necessity. The stage was a street scene with a *Stop—Go* sign occupying the place of most importance. Sometimes the right and wrong way to do things was illustrated and sometimes just what "might happen" was vividly depicted. For instance, one group which was very large got safely across the street except for two little girls, who, owing to their intentness upon conversation, kept falling farther and farther behind. A pushmobile at this opportune time was pushed and pulled noisily into place and shot out into the stage, thereby knocking the erstwhile conversationalists flat. Strange to say, neither was at all hurt, but to the crowd of spectators and the very interested driver of the pushmobile, the traffic officer gave a most enlightening talk on, "Heads Up! Look where you are going when crossing the street!"

X

A seventh grade had had a series of compositions on "The Circus Parade." They had written these in groups and had gotten something really worth while from the standpoint of vivid words—making the listeners really see the pictures. They decided to choose the best one from the various groups, read it, and during the reading to have it dramatized. There were four episodes: (1) "Before the Parade"—people standing behind the ropes—much crowding—balloon man appears—such remarks as, "When will it come? It's already an hour late!" (by reader)—boy sticking his head out of an upstairs window (standing on steps and holding the window frame, defects hidden by crowd)—pulling at parents by children (some first grade children had been borrowed). (2) "At the First Sound of the Band"—several blaring horns which were not so greatly different from circus bands, much looking toward that direction, more heads appearing from upstairs windows, children being lifted the better to see, etc. (3) "The Parade"—every stuffed and toy animal to be found in the neighborhood that could be brought in, others made from cardboard and beaver-board, toy clowns and wagons adjusted, and the whole skilfully pulled across the stage by means of wires. (4) "After

the Parade Has Passed"—calliope imitated by boys (as they do taxi and automobile horns and sirens)—crowd disperses amid much shouting of drivers and the customary confusion attendant upon the dispersal of a crowd.

XI

Nature-study assemblies are always valuable. Separate ones should be devoted to flowers, trees, and birds. Seasonal observations should be made.

XII

May Day programs should be given in the open with songs, customs, and a Maypole dance.

XIII

Special assemblies for Lincoln's and Washington's birthdays should be given so that every member of the school can be present. Even if it is necessary to have short exercises and the children all standing, they should all be there. These exercises may be so varied, and there is such a wealth of material from which to choose, that nothing will be given here for them.

XIV

It is very hard to have effective exercises that make an appeal to all for National Education Week. A department class in arithmetic took charge of these exercises and told the cost of the various things used about the building. Actual figures were given on the amount and cost of the gravel for the yard, coal, and cleaning materials and such commodities. Another class told about universities of the state, colleges, different kinds of high schools and grade schools, and the number of pupils in the public schools.

XV

As a result of unusual interest in library activities a sixth grade put on a "Book Program." The children were dressed to represent different characters from books. In some cases there were groups. *Treasure Island* was represented by John Silver and his parrot; *Prince and Pauper,* by the two characters, the Prince and Tom Canty; *Dr. Dolittle,* by the little man himself—black satchel, tall hat and all; *The Pied Piper of Hamelin,* by the piper followed by many children; *Hans Brinker,* by a boy with a very bright and shiny pair of skates; *The Village Blacksmith,* by a boy with leather apron and carrying a sledge hammer; *Dog of Flanders,* by a huge dog hitched to a wagon with a little boy trudging at his side; *The Raggedy Man,* by a boy dressed as nearly like the picture of that hero, as found in the Riley books, as possible. This was not exclusively a boys' program. The audience was given a chance to guess who the character was and from what book. After this a girl told very briefly something of the story. When the story was a poem and not a book, this was very carefully explained.

XVI

A hygiene program put on by a sixth grade was very effective. They dramatized scenes which were to make very clear the necessity of certain hygienic habits. The first scene showed a boy hopping into bed; he immediately jumped out again, because he had forgotten to open the window. The next scene showed him just getting up and standing in front of the window, taking very vigorous exercises. The next scene showed a tooth-brush brigade; the next, children at a table—much ado about washing hands before eating, drinking milk, and eating of vegetables; next, a girl with overshoes on during school time, and then as she would be when she grew up—very pale and unattractive, of course.

XVII

In *The Teaching of Junior High School English,* by Hawley, there is a suggestion for oral composition under the title of "Littleman's Lecture Course." The pupils had acted on these suggestions and had given "lectures" during class time on various topics that had come under their observation in school and on the playground. Some of them were: "The Use of the Handkerchief as I Have Seen It"; "Hats—How They Are Worn and Used"; "Voices That Please and Those That Do Not"; "Is Politeness a Necessity or a Luxury?"; "Finger-nails—To

Be Hidden or Seen?"; "Clothes—To Be Put On or Thrown On?" This program was most delightful inasmuch as it proved not only that children in the elementary school do have a sense of humor, but that they know how to use it.

I have tried in this article to give something different from any of the programs that I found in the references.

II. CLUBS

The organizing and maintaining of clubs in an elementary school make it possible for the pupils to have a definite and real experience in handling situations that do not occur in any other part of their school experiences. It is an opportunity, in addition, to carry their classroom work further and to get more information upon the subjects that they most enjoy. There is a great chance for leaders to be developed and likewise an opportunity for pupils to know that there are times that call for good followers.

Clubs should never be forced upon either teachers or pupils. If a teacher or group of pupils becomes interested in an activity, either class or extra, that is the time to make the start. There will always be pupils and teachers who do not want to be connected with a club. They can be handled very easily if the meetings are held after school, but if held during school hours, arrangements will have to be made for a study room. Those pupils who do not join a club can then be sent to one of these rooms, where one of the uninterested teachers is in charge.

No principal should attempt a club program unless he is really interested himself. It takes enthusiasm and careful preparation to swing such a venture. Gather all available references on the subject—there are not many. Those that tell of activities in high schools can be read for suggestions.

As a beginning, it is well to ask each teacher what his preference would be. Most teachers have a hobby. Many of them are willing and anxious to carry these out further with the pupils. The pupils should have a chance to give their first, second and third choices, but it is advisable to allow each child to belong to but one club.

It does not follow that just because a teacher has mathematics as his special subject, he will want to sponsor the mathematics club. Perhaps he has a great interest in birds and would be more successful as adviser of the Audubon Club.

After the teachers have decided what club each will sponsor, then the pupils should be given a chance to know what each club will offer during the term. At a given period each teacher should have a chance to talk to the pupils who come to his room. There should be five-minute periods during which time the pupils pass from room to room listening to each teacher explain the advantages of his club. Naturally, personality enters into this "selling talk." After they return to their home rooms, they should put their preferences on paper and hand them in. These should be gone over to determine what can be done to even up the membership or make such adjustments as seem advisable. Giving the pupils a chance for a first, second, and third choice makes it possible to come to some kind of an agreeable arrangement. When the final arrangements have been made and the club is really started, the pupils should be given the opportunity to manage the meetings, plan the programs, and define the policy. It is advisable to allow a club to continue only for five months and then disband. This is long enough to accomplish many things, and not long enough to make it necessary to arouse waning enthusiasm.

Those clubs that have the most interest and accomplish the best results should have

an opportunity to have charge of an assembly program. This not only is an opportunity to show the younger pupils what the older are doing (only seventh and eighth grade pupils have the club privilege), but gives those who did not want to join a club a chance to see what their classmates have been doing. The ideal situation would be to have the entire seventh and eighth grade membership in the various clubs.

Some of the most successful clubs have been: Know Your City, Dramatic, Short Story, History, Bird, Nature Study, Radio, Math., Boy Scout, and Camp Fire Girls.

After the preliminary arrangements and organization, it is well to have the presidents of the various clubs conduct an assembly and boost their own and tell what they are going to do during the term.

Not only do club activities afford an opportunity for carrying further classroom interests, but they offer another chance to democratize a school.

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INDIVIDUAL DIFFERENCES IN THE EXPERIENCE OF CHILDREN—III[1]

SARA E. CHASE

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IV. MOTION PICTURES

During the twenty weeks of this investigation, 209 children of the fourth, fifth, and sixth grades bought 1155 tickets for motion pictures. The boys' average was seven tickets; the girls', four. One boy went 30 times; one girl, 31 times. Five boys and 16 girls did not see any picture.

These facts are similar to those found in other studies. In an investigation of the play activities of 1400 Kansas children eleven years of age, Dr. Lehman found that motion pictures ranked sixth among the activities most commonly engaged in by boys and twelfth among those of girls.[2] In the Cleveland Survey it was found that on a pleasant Saturday and following Sunday in June, 915 children spent on the average one hour and twenty-four minutes at the movies.[3] The Texas Survey found that 49 per cent of the children in three San Antonio schools attended the movies once or twice a week.[4]

POPULAR PICTURES

At the end of the period of this investigation, each child was given his complete list of motion pictures and asked to star the one he had liked best. When this had been done, he was asked to write a short description of the picture starred. In a summary of the starred pictures, only those of the children who had seen at least six pictures were included. This summary showed that twenty-four pictures were starred by one child each. The following lists show those preferred by three or more children.

BOYS

Pictures	*Number of times starred*
Vanishing American	9
Volga Boatman	7
Black Cyclone	6
Cohens and Kellys	4
Best Bad Man	3
A Tough Guy	3

GIRLS

Volga Boatman	7
Vanishing American	3
Blind Goddess	3
Beverley of Graustark	3

The following figures show how many children saw some of the pictures:

Pictures	*Number of Children*
Best Bad Man	100
Vanishing American	82
Dancing Mothers	81
Behind the Front	72
Let's Get Married	60
Volga Boatman	71
Blind Goddess	70
Untamed Lady	60

[1] The first and second installments of this article (which is a section of a Master's thesis at the University of Chicago) appeared in the November and December, 1928, issues of this JOURNAL. This is the concluding installment.

[2] Bobbitt et al, *Curriculum Investigation*, p. 156.

[3] Johnson, *Education Through Recreation*, Cleveland Recreational Survey, VIII, p. 47.

[4] Noonan, *Courses of Study and Instruction*, Texas Educational Survey Report, V, p. 61.

These quotations from advertisements or descriptions in the *Springfield Republican*, or from advertisements on the card of the Phillips Theater, show something of the nature of the pictures popular with the children.

The Volga Boatman

The Volga Boatman takes no sides in the Russian situation. It is primarily a love story, using as colorful background one of the most important and arresting situations in contemporary history. . . . The dramatic interest centers in the contacts between a lovely aristocrat and a sweat-stained boatman of the Volga.[5]

Black Cyclone

Paralleling the fascinating love story between Rex and Lady, a beautiful dappled grey, is the romance between two young persons.[6]

The Blind Goddess

A mystery thriller, disclosing the hidden motive which may animate those whose business it is to prosecute and to defend crime—the weakness and fallibility of judges, jurors, witnesses, and circumstantial evidence.[7]

Vanishing American

The screen's mighty tribute to the American Indian, first lord of the western continent. . . . Showing the parade of civilization from the first man and his mate down to the modern Indian. . . . the Red Man's gradual eclipse before the irresistible sweep of white civilization.[8]

Cohens and Kellys

The story revolves about a young Irish policeman who falls in love with a Jewish girl. They are secretly married so as not to incur the wrath of their parents and each goes on living as before.[9]

Beverley of Graustark

Dressed as a boy, she entered into the maddest, most perilous, romantic escapade you have ever seen.[10]

THE THEATER PATRONIZED BY THESE CHILDREN

The motion picture theater where these children saw many of the pictures reported on their slips is not far from the schoolhouse. They often went unattended by parents. Many went on Saturday or Sunday afternoon.

On Wednesday nights this theater had "Country Store Night," when the holders of lucky numbers were given presents which were presented to the accompaniment of jokes in somewhat questionable taste. Wednesday nights' attendance in the case of the children ranked next to that of Saturday and Sunday afternoons. Many of them had held lucky numbers and had drawn prizes. All of them hoped to draw a five-dollar bill. One boy in the special class had received as prizes a table lamp, a floor lamp, a dollar bill, a two-dollar bill, a box of strawberries and a bottle of cream, some underwear, and a necktie. This boy did not intend to be absent on any Wednesday night.

THE MOTION PICTURE AS AN EDUCATION

The motion picture has been called a fine history teacher. Curtis says:

Nearly everything that has to do with the study of geography, history, biography or the processes of industry can be represented more perfectly through the moving picture than in any other way. Ofttimes a historic scene can be portrayed in fifteen minutes by the moving pictures so that it will never be

[5] *Springfield Republican*, April 25, 1926.
[6] *Ibid.*, March 9, 1926.
[7] *Ibid.*, May 9, 1926.
[8] Card of Phillips Theater, Springfield, Mass., March 7-13, 1926.
[9] *Springfield Republican*, April, 1926.
[10] *Ibid.*, May, 1926.

forgotten, while the mastering of the lesson from the geography or history is a laborious and time-consuming process in the first place, and the record is likely to be written upon the sand.[11]

On the next page but one after the above quotation, Curtis states some facts that should be, it seems to the writer, less than forty lines away from the first statement:

A short time ago I saw a film representing the story of "Ivanhoe." There was scarcely a detail in the picture that was true to the story of Scott; and there are many supposedly historical scenes that are likewise inaccurate. The impressions imparted through the moving picture are so much more vivid than those imparted through the printed page, that it will be difficult to correct the wrong impressions that are given in this way.[12]

SOME IMPRESSIONS IMPARTED TO THESE CHILDREN THROUGH MOTION PICTURES

The descriptions of the best liked pictures written by the children make one question the vividness of the impressions imparted by some of the historical scenes. The "Vanishing American" was advertised as "the screen's mighty tribute to the American Indian, showing the parade of civilization from the first man down to the modern Indian."[13] Here are some typical impressions that were imparted by that picture to these fifth- and sixth-grade children:

1. The Indian reservation was big, and there was an Indian that liked a girl. The caretakers of the Indians were good, except one. The Indians helped in the wars.

2. There was a war between the Indians and the whites. Richard Dix was on the Indian side. His girl gave him a Bible. He said, "This Bible is going to stay with me until I die." During the war, Richard ran out to stop it. He was shot by a white man. The girl came out after him. She put her hand in his shirt, and there she found the Bible.

3. There was a war with the Indians and white men. Richard Dix fought with the white men. The Indians lost, and the white men won.

4. I liked the "Vanishing American" because it was romantic, exciting, and sad. A warrior fell in love with a white girl. He and a band of Indians fought in the World War where he saves his girl's fellow. He dies trying to make peace between his enraged Indians and the white people.

The "Volga Boatman" might be expected to teach both geography and history. The following descriptions were written by fifth-grade children:

1. There is a big river in Russia. It is called the Volga. There are people called the reds and others the whites. The whites are bad people. They make the red people slaves. At the end they had a big war and the reds won. The reds made the whites their slaves.

2. The picture tells about some poor people pulling a boat up hill. After that the gypsies had a war on Russia. The girl would not give up the man who was put in chains. A man saved the Princess because she saved him when her husband wanted to strike him.

3. The Volga Boatman was a man in old Russia who with his companions had to pull a great boat. The part I liked best is when they had the Russian Revolution and the fighting.

A girl who had lived in Russia wrote this: "The Volga Boatman shows how the people in Russia suffered. I liked the pic-

[11] Curtis, *Education Through Play*, p. 298.
[12] *Ibid.*, p. 300.
[13] From an advertising card of the Phillips Theater, Springfield, Mass., March 7-13, 1926.

ture because that was really the way it was in Russia."

A COMPARATIVE STUDY OF MOTION PICTURES AND OTHER METHODS OF INSTRUCTION

A committee under Dr. Freeman of the University of Chicago made a comparative study of motion pictures and other methods of instruction. The findings of this committee do not support the statement made by Dr. Curtis in *Education Through Play*. In the summary, these principles are given:

> The relative effectiveness of verbal instruction as contrasted with the various forms of concrete experience represented in visual education depends on two major conditions, the nature of the instruction to be given, and the character of the pupils' previous acquaintance with the objects which are dealt with in the instruction.[14]

> It does not appear that motion pictures are of outstanding and unparalleled value as means of awakening interest in a subject or of stimulating activity, in comparison with advanced modern methods of instruction.[15]

> The superior effectiveness of the teacher as contrasted with any merely material device was indicated repeatedly in the investigation.[16]

> The pupil never really completes his mastery of a subject merely from having it presented to him. He should make it a working part of his mental machinery. To provide this we must encourage discussion, independent reading, problem and project work, and the like.[17]

The girl who had lived in Russia found meaning in the "Volga Boatman" because of her past experiences. Had the parents who took their children to the "Vanishing American" because of its educational possibilities talked it over with them before and after they saw it, they would have increased its educational value to a considerable extent.

THE HYGIENIC SIDE

There is a hygienic aspect to the motion picture that should not be ignored. The ventilation in many motion picture theaters is poor. Children often seem to consider pop-corn, peanuts, candy, or gum a part of the program. The theaters frequently are not clean enough to serve as dining-rooms. The fire hazard is great enough to warn people to note the nearest exits. The eye-strain in the case of some children is a matter for consideration.

AS AN INFLUENCE ON ATTITUDES

While some people claim that the motion picture is an important factor in educational growth, others claim that it is a strong influence in the matter of unwholesome attitudes and behavior. Neither side has scientific data with which to support its claim.

If motion pictures directly affect the moral attitude of the children, those things that most appeal to their interest would tend to exert the greatest influence on their attitudes. These children's descriptions of the best liked pictures were studied to determine what qualities had made the strongest appeal. Eighty children enrolled in the fifth and sixth grades had described 39 pictures. The qualities listed in Table I seemed to have won their favor in these pictures.

Arguments for educational growth in motion pictures as well as arguments for unwholesome attitudes acquired through moving pictures could be found in this table.

[14] Freeman et al., *Visual Education*, p. 69.
[15] *Ibid.*, p. 76.
[16] *Ibid.*, p. 78.
[17] *Ibid.*, p. 80.

TABLE I

QUALITIES IN 39 MOTION PICTURES MAKING STRONG APPEAL TO FIFTH AND SIXTH GRADE CHILDREN

Quality	Times Occurring
1. Excitement	22
2. War or fighting	20
3. Funny actions	17
4. Sadness	9
5. Actions	5
6. Bravery	5
7. Mystery	5
8. Facts	2
9. Kindness	2
10. Animals	2

MOTION PICTURE LISTS AND READING LISTS

Motion pictures may indirectly affect the children by keeping them from more worthwhile activities. They may keep children indoors too much. They may keep children from reading.

To see how the long motion picture lists of these children checked with their reading lists, the two lists were compared. There were eight boys and eight girls who had seen twenty or more moving pictures. The boy who had the longest moving picture list had the longest reading list among the boys. The average reading list for boys who had long moving picture lists was twenty-two books, while the average reading list for all of the boys was eight books. The average reading list of the girls who had long moving picture lists was twenty-seven books, and that of all the girls was ten books. The motion picture had not kept these children from reading.

PROBLEMS FOR THE SCHOOL

The school should join forces with any civic organization that is trying to raise standards in the matter of motion pictures. It should do something to initiate such procedure.

The school should know from observation, not hearsay, what the reactions in the motion picture theaters on Saturday afternoons are. When it has facts for a proper basis, it should use them in parent education. In the case of the parents of these particular children, interest in the question of motion pictures suitable for children can be aroused by reading to them some of their own children's descriptions of pictures they have seen.

THE ORGANIZATION OF THE ELEMENTARY SCHOOL—IV

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Proposition 5. Every group of teachers in the coöperative plan of organization should be led by one of their own number, designated chairman, or group leader.

This principle is the necessary correlative of Proposition 4.[1] Without leadership there can be no true group activity. Inspiration, guidance, and direction must be provided for. Without these coöperation, if it exists at all, will be more or less spasmodic, lacking in continuity, and wasteful of effort. With them focus is possible, intelligent, with division of labor and proper procedures to economize both time and energy of those engaged in the enterprise. The group plan of organization of teachers cannot be confidently expected to work successfully without this provision.

Whether group chairmen should be elected by the teachers themselves or appointed by the principal depends largely upon circumstances. Other things being equal, the feeling of loyalty likely to be encouraged by participation in the choice of leader should turn the scales in favor of election as opposed to appointment. A principal who prefers to avoid taking the responsibility of the selection of one from the number to be first will naturally leave the decision to the group itself. In situations in which the idea is quite new and the teachers have had little experience with committee work, or other such cooperative activities in which leadership is essential, the first stage may well be gotten over by the more democratic procedure.

Appointment should, however, be the prevailing mode. The function of chairman is to be exercised not primarily for the satisfaction of the teachers but for the good of the school as a whole. The chief object is better opportunity for the pupils to learn. Hence appointment by the principal, who is expected to view the work of the school as a whole, with a perspective not possible to the individual teacher, is logical.

In a school of fifteen teachers it may happen that the outstanding personalities and best trained workers are to be found in the same grade or level of the school. It may be desirable to put one or more of these persons in charge of a group with which she is not yet closely associated. If possible the principal will desire to place the strongest or most tactful or most earnest members of the corps where they can make their influence felt. This end can be more readily and directly accomplished by appointment than by election.

In any case the principal should recognize that such an innovation will cause disturbance and perhaps fail of its purpose unless it is properly prepared for. The group idea as a whole must commend itself to those who are to carry it out. This means that it must be skilfully introduced. There must be a feeling of need of improvement. The prevailing one-teacher-for-all-subjects type of organization must be seen as a handicap. Modest experiments in the exchange of work between two or more teachers should first be carried on. A trial group of those most favorable to the

[1] See *Educational Method* for December, 1928.

new plan may well be formed. The teachers themselves must have opportunity to think the thing through so as to be able to participate in the enterprise not only heartily but also intelligently. In a word, the principal must do a first-rate piece of project teaching.

To impose the new plan upon the staff of the school all at once as a complete system will usually prove dangerous and may be fatal. Adjustments of so radical a nature are not easily made by all types of minds. In developing the coöperative-group plan of organization, the first rule is, "Make haste slowly."

Circumstances must of course largely determine how many shall constitute a group and who shall be chairman. The idea, if it indeed have merit, must prove adaptable to all sorts of schools in all sorts of places. If there are two teachers in the school, they will divide the work between them—each perhaps taking half of the program with each class or group of pupils. If there are three, then perhaps the division will be by thirds. If there are six, one of whom is designated principal, then the latter will himself act as chairman. If there are sixty, there will be as many groups as the arrangement of the program of studies calls for—ten to fifteen, it may be—in which case the principal will do well to avoid acting as chairman of any one group and (except in emergencies) his assistants likewise.

In the larger schools the chairmen of groups, together with the principal's assistants, if he have them, will constitute the principal's cabinet or council, and in this council the policies of the school may be considered in a manner not always possible in larger gatherings. In this way the principal will be able to exert an influence on teaching practices that is now often largely hindered by excess of administrative responsibilities and the sheer weight of numbers. It seems unnecessary to expand upon the point that the activities of such a cabinet will prepare for and supplement activities in which the corps as a whole participate, not supplant them.

Proposition 6. Each group leader or chairman should bear a portion of the responsibility for the supervision of the teaching done by the other members of his or her group.

To those accustomed to think of supervision as the peculiar province of itinerant "supervisors," not members of the staff of any school, and of supervision of teaching as consisting solely of observing and criticizing actual classroom work, this proposition will appear absurd or worse. How can supervision be carried on except by supervisors, and how can a teacher herself in charge of a regular class find the opportunity to visit other classes, observe the technique of the teacher, and point out to her methods of improvement?

To the first objection it is proper to retort, first, that traveling or general supervisors, either of grades, groups, or subjects, should not attempt, if it can be avoided, to visit teachers severally and regularly throughout a school system with a view to an organized follow-up campaign of improvement of the work of each of them individually. The fact that such has been and apparently still is the prevailing fashion need not prevent us from questioning its value. The simple fact is that supervisors who belong to the staff of the superintendent's office, in the nature of the case, cannot usually visit all the teachers in their jurisdiction frequently enough to enable their giving adequate personal aid. Moreover, they could be better occupied.

With this we come to the second answer, namely, that supervision of teaching comprises vastly more than "visit and interview." Visit and interview grew out of the calls of inspection made by the select-

men of colonial days and represented an advance in that professionals took the place of laymen, and more frequent contacts superseded the annual exhibit. But they are not adequate today. The function of supervision is helping teachers; in some states the supervisor of rural and consolidated schools is called "Helping Teacher." To attempt formal definition, we may say that, "Supervision is helping teachers to give their pupils the best possible opportunity to learn what the school is intended to teach." This implies both a wide range of guidance and a varied use of agencies. Teachers need help not only as individuals but also as members of groups whose efforts, to be effective, must be coördinated. They need help not merely in conducting class meetings but likewise in directing study, in dealing with individuals as individuals, and in connecting extra classroom activities with intra-classroom activities. And they need help not solely in attaining to better "methods" but in getting a fundamental view of *method,* that is to say, the philosophy of the school program, with its aims, general and specific, its pupil activities, regarded as indispensable in accomplishing those aims, its choice and use of materials, its standards of attainment, and its measures of progress, *as well as* its conception of the rôles to be played by the teacher.

Likewise the agencies that supervision should command are many. Not least of these are—or should be—the courses of study. These are supposed to express in an orderly way the total program of educational activities and provide for the teacher a plan of campaign. At their best, courses of study constitute, potentially at least, the most effective instruments the supervisor has at hand. To these may be added fact-finding through objective tests, formal or informal, experimentation, committee work, opportunity to learn what others are doing, consultation of authorities by means of the professional library, and discussion of common problems in general group conferences. This list takes no account, moreover, of the more remote influences that supervision may bring to bear to raise the general level of performance on the part of the teachers of a school or school system.

In the total scheme of supervision there must be a place for the "man on the ground." Outsiders can never take the place of the members of the family. Not only should the principal of the school become able to qualify as a professional leader and guide, but the master teachers who are working with him should have opportunity to supplement his efforts. This they can do by presiding at group conferences, as has already been indicated. At such conferences the welfare of the children will be the chief theme. How can this be best promoted—by what activities, with what materials? What are the facts? What do the facts mean? How are others seeking to solve these problems? What progress are we making? How can we determine? What is our most pressing need? How can it be served? How can our efforts be coördinated? How can the children's experiences best be integrated? What materials do we need now? How shall we obtain them or prepare them together? These and other similar questions will be asked and answered—*in the situation,* by those immediately concerned.

If the group chairman does nothing more, his or her office will be abundantly justified. But she—or he—may be also a connecting link with other groups. She helps to orient the newcomer, renders records and reports more accurate, simplifies routine, and, where cadets from the training school are present, takes the practice student under her wing. By doing the latter, she not only gives the best available

support to the normal school course but also gains brief respite from her stated task, so that she may look in on her neighbors, attend cabinet meetings, or otherwise exercise her special functions.

It has often been said that the work of supervision is essentially to disseminate the practices of the best teachers, those whose work is not merely good but has real distinction. In the organization of groups with master teachers as leaders we seem to have one promising device for bringing this desideratum to pass. At the same time we set up a goal to awaken ambition and promise reward for excellence of service. And we put in training for their future responsibilities the principals and supervisors of the near future.

SILENT READING IN ITS PLACE

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Reading materials and methods as pursued in schools have reflected the ideas and demands of outside life since reading as a subject, for the common run of man, has held a prominent place in the school curriculum.

> Let not thy heart envy sinners,
> But be thou in the fear of the Lord all day long!

was the opening sentence of the New England Primer of colonial days. The Puritan was the English-American replica of the sixteenth century German protestant reformer. Salvation was only attained by the ability of the individual to read the Bible in the vernacular. "Above all things, let the Scriptures be the chief and most frequently used reading book, both in primary and high schools. Is it not proper and right that every human being, by the time he has reached his tenth year, should be familiar with the holy gospels?" said Martin Luther. Outside life interests dictated reading materials, but the wisest pedagogue had not yet learned that what was of interest and concern to the adult might not necessarily be of interest and concern to the child.

> This is Ned.
> Ned can spin the top.
> Can Ned spin the top?
> Yes, Ned can spin the top.

You fifty- or forty-year-olds need not be told where this literary gem could be found! Although there have been very few "Neds," many boys regardless of name have spun their tops. Reading materials had at least been sought outside the chief reference Book of the Puritan.

As to method, it was formerly thought that the only way to read was to read, somewhat like Horace Greeley's—"the way to resume is to resume!" And reading meant reading aloud, for how else was the teacher to know when it had been read correctly? There was a very direct purpose at one time for much oral reading and declamation in school. At the time of the sophists in Greece, preferment for the boy meant practice in grammar, rhetoric, and logic. Oratorical training in the schools of Rome had continued until the time of Quintilian, for it was by the art of discourse that a restless populace could be moved and the legions kept loyal to its Cæsar. There was a very direct purpose

for many centuries for oral reading practices in school. Even in the days of our own Henry Clay and Peter Cartwright, information was spread chiefly "by word of mouth" from stump or pulpit. Every boy strove to be a Henry or a Peter. Our own father's early rural school Friday afternoon masterpiece (in the 50's) was:

> You'd scarce expect one of my age
> To speak in public on the stage,
> But if I chance to fall below
> Demosthenes and Cicero,
> Don't view me with a critic's eye
> But pass my imperfections by.

The old McGuffey's, one of the most excellent readers ever published in its time, had even a 1901 edition with twelve pages of preface called "Elocutionary Introduction," giving suggestions to the teacher as to training in "pause, emphasis, inflection, force, volume, enunciation, position of hand, body," etc., but not one word as to "silent reading." The time spent on the above was so long that pupils used to hold a "thumb paper" at the bottom of the book to keep from wearing through the leaves! A modern teacher who takes her early beginners through ten or a dozen excellent modern primers and readers has probably never heard of this old necessary reading adjunct!

Oral reading still has its place when made purposeful by:

1. Providing a check on the pupil's accuracy of visual perception, enunciation, pronunciation, and vocabulary mastery.
2. Affording the teacher a rough test of early eye movement habits.
3. Cultivating early interests and purposes in reading in general by use of the children's activities.
4. The locating and producing of fact data for discussion materials.
5. Verifying or proving statements or conclusions challenged.
6. Selecting the "funny," the "manly," the "pretty" sayings, etc.
7. Offering announcements, minutes, reports, etc.
8. Cultivating the art of reading stories entertainingly, or for the enjoyment of others.
9. "Audience reading" of poetry in order to develop an appreciation of rhyme and rhythm.
10. The rendering of typical selections which have moved men or made history, as the "Give me liberty, or give me death" type.

It may be just possible that the radio with its more and more public readings, and the talking "movies" with the premium on the "speaking voice," will see a return in some degree to more oral reading in the school. Some excellent modern readers make provision for children to read silently to satisfy curiosity aroused by a study of illustrations, say, or to get the drift of the story, this to be followed by a retelling or acting out in order to show understanding, then an oral rendering. Much of this is done in conjunction with reading materials which form our cultural heritage.

However, conditions of life for the ninety and nine have changed within the last few decades and these changes have left their implied demands on the school. Opinion is now formed more than ever from the printed page. Books, magazines, newspapers, circulating libraries are within the easy access of all. How do we read the book or paper in the home? We read it "to ourselves" in the easy chair, and we do not wish to be interrupted. From the mass of printed matter we must learn to read rapidly, to skim, to "hit the high places," and for what purpose: to get the facts, the import, the essential points. The ways and methods of life must always determine the ways and methods of school, else the school

is not what it should be. If life and its methods change, the school and its methods must also change, if it is to be a social institution. Materials and methods from very pertinent life situations are obvious in the two kinds of silent reading exercises taken from recent readers:

What is your name?
How old are you?
Where do you live?
What is your telephone number?
Have you a brother? What is his name?
What is your father's name?
What is the name of your school?

Choose: Children should

drink coffee	never eat fruit
drink milk	eat ripe fruit
drink tea	drink good milk
drink cocoa	never drink coffee

The best educational opinion today supports more practice in the above types, among others, of silent reading in the school. Some of the arguments summarized are:

1. Printed language is primarily a representation of some one's *thought* and not oral expression. Any intelligent oral rendering implies, in fact, a thought mastery first.

2. Most upper grade, high school, college, and life study is by the silent reading method. "The primary purpose of the school is to teach people to do better the desirable things they are likely to do anyway."

3. Experimental, controlled tests in grades three to ten with nearly five hundred pupils show that 70 per cent of all pupils gained a greater per cent of thoughts by the silent than by the oral method of reading. It is even felt that excessive oral reading may fix slow silent reading habits later.

4. Experiment shows that, at about the third or fourth grade, the rate of comprehension, or silent reading understanding, begins to reach or exceed the rate of articulation. A first grader, for example, is able to pronounce words more rapidly than he is able to recognize their meaning. A fourth grader begins to comprehend more rapidly than he can pronounce. Continued oral reading becomes an enemy of speed in recognition.

5. We are coming to believe that reading habits are somewhat fixed by the intermediate grades, hence more stress of the proper kind in the earlier grades.

ANALYZING THE DISTRIBUTION OF DRILL IN FRACTIONS

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The occasion for this note is Dr. Brueckner's able article on "The Distribution of Practice in Fractions," which appeared in this JOURNAL for May, 1928. In his article Dr. Brueckner criticizes certain fundamental assumptions that I have made relative to analyses of skills in fractions, which analyses are useful in appraising drill in fractions and, of more importance, in the building of drills in fractions.

The general point of view presented in Brueckner's article as a whole seems to me to be strong and correct. It is easy for me to take this position because his 58 "types" for subtraction as published in May, 1928, seem to me but an obvious deduction from my 43 "unit skills" published some four years previously. That is, his 58 "types" are but a sampling of many types easily written from a schedule of "unit skills."

What I do not agree with is Brueckner's criticism of my analysis of difficulties in subtraction.

Relative to this criticism, he gives a compression of my analysis of division as it appeared in the *Third Yearbook of the Department of Superintendence* and then assumes an analogy for subtraction. He need not assume an analogy for subtraction since I have published an analysis of subtraction also.[1] The analogy unintentionally misrepresents the facts and without this unintentional misunderstanding there is little, if any, force to the resulting criticism.

Quoting from Brueckner (one can easily re-read the whole article if the quotation stripped of its setting is not clear):

> An analysis, such as Knight suggests, assumes that a specific skill functions in any situation in which it may occur. For instance, in the example $\frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$, and $4\frac{1}{4} - 2\frac{3}{4} = 1\frac{4}{4} = 1\frac{1}{2}$, the ability to reduce the fraction $\frac{2}{4}$ to lowest terms is involved. But it must be clear that this is not the only factor that needs to be considered. The situations in which the skill appears are entirely different. The complexity of the situation undoubtedly complicates the use of the specific skill. The same objection could be raised to the whole procedure suggested by Knight. The important consideration, therefore in this instance, is not what skills are found in any set of drill materials, but rather in what situations or examples these skills appear in combinations of different kinds.
>
> These points suggest another basis for analyzing or constructing drill materials in fractions, namely, the analysis of the *types of situations* in which fractions appear.[2]

It is evident that Brueckner is of the opinion that I think that the $\frac{2}{4}$ in $\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$ and in $4\frac{1}{4} - 2\frac{3}{4} = 1\frac{2}{4}$ are identical and if such a $\frac{2}{4}$ operates in one situation it will operate in any situation at all similar. This is utterly contrary to fact. In Lesson 7 of *Problems in the Teaching of Arithmetic*, under "Analysis of Remainders," the following appear:

> Units of Skills Nos. 36-43 deal with different types of answers and it is presumably clear

[1] Knight, Luse, and Ruch, *Problems in the Teaching of Arithmetic.* Iowa Supply Company, Iowa City, Iowa, 1924.

[2] *Journal of Educational Method*, 7: 352-358 (May, 1928).

that different types of answers should appear with variations in other aspects of example.

Unit of Skill No. 40 is: Answer a proper reducible fraction as: $\frac{9}{10} - \frac{8}{10} = \frac{1}{10} = \frac{3}{5}$. (It might have been $\frac{3}{4} - \frac{1}{4} = \frac{2}{4} = \frac{1}{2}$.)

Unit of Skill No. 43 is: Answer a mixed number involving a reducible fraction, as $10\frac{7}{15} - 6\frac{8}{15} = 4\frac{3}{15} = 4\frac{1}{5}$. (It might have been $4\frac{1}{4} - 2\frac{3}{4} = 1\frac{2}{4} = 1\frac{1}{2}$.)

In other words, my analysis published in 1924 clearly recognized that a reducible fraction alone in an answer did not take care of a reducible fraction when it was part of a mixed number. One is Unit of Skill No. 40 and the other is No. 43.

In considerable amounts of analysis of drills and in much work of building drills, these distinctions between Units of Skills 40 and 43 have been kept definitely separate.

Brueckner's error in reporting the writer's opinion relative to what is an adequate analysis of subtraction of fractions is due to: (1) assuming that a compressed analysis of division told the whole story—no compression can; (2) assuming that, reasoning by analogy, he could prophesy from division what the writer would suggest for subtraction. Brueckner, on second thought, would be the first to insist that an inadvertency coming from his pen should be plainly corrected. The reference to Units of Skills Nos. 40 and 43 above will, I trust, be accepted as sufficient correction of an unintentional misrepresentation.

SPECIFIC SKILLS VERSUS TOTAL SITUATIONS

I wish to make one more observation relative to the quotation from Brueckner. The complexities in which a unit of skill appears unquestionably affects the ease of operation of that skill. But his assertion that "the important consideration, therefore, is not what skills are found, but rather in what situations they appear," is by no means an adequate assertion.

I share with many some suspicion of logical "therefores" in attempts to discover psychological facts. I insist that both, what units of skills are found and in what situations they occur, are of very definite importance. We must certainly know what the units of skills are, as well as where they appear.

The psychology which underlies the writer's analysis is perfectly straightforward and simple. In learning, connections or bonds are formed, not only with situations as wholes, but also with elements of situations. Thus, in a long mental function involving a number of steps such as subtraction of fractions, the learner forms connections with situations as a whole and also with elements of the gross total situation. When we solve an example in subtraction of fractions and carefully observe our procedure, we will find that it can be classified under four main categories, namely,

MAJOR ELEMENTS OR CATEGORIES IN SUBTRACTION

1. Recognizing the operation, subtraction of fractions.
2. Writing the operation in correct form.
3. Procedure in computation.
4. Procedure with remainders or differences.

These categories constitute elements in the general situation, subtraction of fractions, which the learner comes to respond to as more or less independent situations. In this way, for example, the learner comes to respond to the remainder $\frac{3}{4}$ to be reduced and to the remainder $1\frac{3}{4}$ to be reduced as complexities in the response to the element—procedure with remainders—in the total situation, subtraction of fractions.

As a mere matter of fact introspection as well as careful observation of children

will show that, after a momentary glance at the total situation, we attack the elements one by one.

Under each of the above four categories, we would list various forms and difficulties to be met. These we dub "units of skills" for want of a better name. In every total situation some unit of skill from each category must appear since every total situation (1) must be stated in some way; (2) if at all difficult, must be written in some way; (3) must involve varying combinations of computation; and (4) one or several types of manipulation of answers must be indulged in, from leaving it alone as in the answer of $\frac{3}{4} - \frac{2}{4} = \frac{1}{4}$ to an answer as $2\frac{2}{4} = 5\frac{2}{4} = 5\frac{1}{2}$.

In providing total situations, then, it is important that various "units of skills" of each category be present with varying "units of skills" of every other category.

Brueckner suggests a list of 58 types of total situations which as a matter of fact are only a few of all possible combinations of varying elements which can be made. When "total situations" alone are used, the assumption seems to be implied that children learn to respond to gross total situations only—more or less a matter of sheer animal learning. But when an analysis of any function includes an attempt to list the elements of gross total situations as well as the total situations themselves, we recognize that children may respond to elements of situations as well as to gross totals. Such recognition is in accordance with the truth. We are also in a position to find out amounts of transfer of any given element from one situation to another; such knowledge is not entirely lacking.[3] And further, we are in a position to make sure that in the full array of total situations which we spread before the child no element has been slighted and that no element has failed to be combined with all other elements in varying combinations with sufficient breadth of total experience.

Denying the usefulness of analysis and thinking of total situations only, Brueckner has failed to see that his 58 types are but a sampling of various combinations or "units of skills" as classified by the writer, that these 58 types are by no means the complete list of total situations. Perhaps they should be if teaching were done in total situations only.

It seems to the writer that it is better to be aware of elements as well as gross total situations, to combine various elements into total situations rather than simply list a fraction of the total situations which exist. In the end a listing of Brueckner's total situations results in the same thing as proper combinations of elements into total situations result in, with these differences: gross total situations imply learning to respond to total situations only, in which case all useful total situations must be specifically taught. This is impossible since the list would be too long where it is even usefully complete, especially when various numbers are used as well as various elements. Further, control of learning via gross total situations is needless even if it were possible, because human learning even in the fifth grade is luckily far more than responding to total situations—it is also responding to elements. The problem is to get an element well enough mastered and presented in a sufficient number of varying situations to become of general use. The "sufficient number" is a function of ability to learn—I should judge that Brueckner's 58 types are surely enough, probably too many, and at any rate cer-

[3] Examples of such knowledge in arithmetic are: A. O. H. Setzephandt, "Facilitation of Learning in Fractions;" Dr. M. C. Hayes, "Mental Functions Involved in the Computation of Fractions;" Dr. Eva M. Luse, "Transfer Within Narrow Mental Functions." The references are available from the Librarian, State University of Iowa, Iowa City, Iowa.

tainly only another form of presenting various combinations of units of skills.

That appraising drill, in terms of many total situations versus in terms of presence of a combination of units of skills approximates the same thing will be apparent from the following:

Brueckner analyzes $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$ as subtraction of like fractions, remainder (difference) a proper fraction; no reduction.

I would report $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$ as a combination of units of skills 1, 6, 21, 24, and 40. By referring to my analysis of subtraction of fractions, it is found that:

Skill 1 is horizontal form in contrast to other ways of stating an example.
6, similar fractions used.
21, subtraction of numerators of similar fractions.
26, no borrowing called for.
40, answer an irreducible proper fraction.

It is to be noted that when Brueckner describes the total situations he does so in terms of these elements. With this I agree. To one who has analyzed drill in fractions by listing total situations only, and later tried similar analysis by reporting presence or absence of elements, it will be apparent that the resulting pictures are approximately the same except that the "unit of skill" method tells at a glance what elements are missing (if any) and in what types of situations they are missing in the full experience provided to the child.

A FUNDAMENTAL CONSIDERATION

It will perhaps be useful to the reader to review a fundamental consideration of learning of which the foregoing discussion presents but one of many instances.

Brueckner points out that the learning of an element or unit of skill in one total situation may not operate in another total situation. This does not need to be pointed out, however, because everyone knows it. My only objection to his statement is the implication that he knows it and that I do not. As a matter of fact the instance he uses relative to reducible fractions in various total situations was pointed out (and other variations also) by the writer some four years before Brueckner stated similar facts.

Now the fundamental issue is this, stated in terms of three alternatives:

Alternative No. 1. We should teach all total situations we wish the learner to be able to cope with.

Reason: One situation varies from another because (while they may share many identical elements) their totals are different. An element learned in one total situation will not operate in another total situation because the child responds to total situations only or mainly.

Alternative No. 2. Stress the teaching of elements. It is not necessary to think much about the situations in which these elements appear. If a child has learned to cope with an element however it is presented, he will be able to cope with that element in any situation in which it may appear. That is, an element once learned will operate in any complex.

Reason: Humans (even children) possess such steady powers of analytical thinking that they will be able to spot any element in any situation and respond to it correctly. Being able to respond to any element they have learned means that they can respond to all elements they have learned. Hence if we teach all units of skills we can depend on the child to respond to them in any combination in which they be put together to form a total situation.

Alternative No. 3. Teach all the elements of a total mental function, each one

in enough varying gross total situations so that the child will receive adequate practice in different combinations of elements or, in other words, will meet enough total situations of various kinds so that when he meets a brand new total it will be enough like other combinations of learned elements for him to cope with it through inferential thinking.

I contend that Alternative No. 1 is manifestly impossible, that No. 2 is wrong, and that Alternative No. 3 is the best basis of instruction we now have and is approximated in my analysis which Brueckner criticizes through a misunderstanding.

Alternative No. 1 is manifestly impossible except with very narrow functions, such as the 100 addition combinations, subtraction combinations useful in short division, types of denominator combinations that appear in socially useful arithmetic, etc.

My contention that all total situations cannot be taught except with those having an eternity at their disposal will be seen to have merit by considering the following two examples in arithmetic.

Example. In long division, using two digit divisors only, single digit quotient, less those divisors in which the second digit is zero, there are 40,095 possible divisor-dividend-quotient-remainder combinations. Each one of these varies somewhat from every other. Each one is a total situation (for the moment) varying from the other. Now also any particular divisor-dividend-quotient-remainder combination although alike logically is really a series of different total combinations according to whether it comes at the beginning of an example, in the middle, or at the end. Since, then, these are different combinations, they should also be taught if Alternative No. 1 represents the needs of human learning.

Samples of the 40,095 different total combinations, as far as long division computation is concerned, are:

$$\begin{array}{r} 6 \\ 27\overline{)165} \\ \underline{162} \\ 3 \end{array} \qquad \begin{array}{r} 5 \\ 41\overline{)209} \\ \underline{205} \\ 4 \end{array} \qquad \begin{array}{r} 5 \\ 41\overline{)245} \\ \underline{205} \\ 40 \end{array}$$

These are total situations all different.

Samples of how the same combination numerically presents different total situations psychologically are:

$$\begin{array}{r} 6 \\ 27\overline{)165} \\ \underline{162} \\ 3 \end{array} \qquad \begin{array}{r} 261 \\ 27\overline{)55654} \\ \underline{54} \\ 165 \\ \underline{162} \\ 34 \\ \underline{27} \\ 7 \end{array} \qquad \begin{array}{r} 116 \\ 27\overline{)3135} \\ \underline{27} \\ 43 \\ \underline{27} \\ 165 \\ \underline{162} \\ 3 \end{array}$$

Numerically the numbers in bold face type represent repetitions of the same situation, psychologically they differ. It is easy to see, then, that if all total situations must be taught it will be necessary to present literally millions of total situations each varying from the other. This is manifestly impossible. At this point the reader may note the last paragraph of the quotation from Brueckner at the beginning of this article and speculate on just how long a list of types of situations the use of Alternative No. 1 would involve.

A second illustration of the real meaninglessness of the theory that total situations are the only things to be considered is in the case of subtraction of fractions. Brueckner lists 58 types with the implication that these types cover the mental function. It is demonstrable that, if we hold strictly enough to the theory of teaching in terms of total situations to have the theory mean anything, there are not 58 types but thousands of types each representing a situation different from all other total situations. Thus Brueckner's Type (a) $\frac{2}{3} - \frac{1}{3} = \frac{1}{3}$ is (a) subtraction of like fractions; (b) remainder (difference) a

proper fraction; (c) no reduction; is one of his 58 types. If there are only 58, as implied, then the following total situations are so much like Type (a) that they are identical and their variations need no identification. This is false.

(a_1)	(a_2)	(a_3)
Subtract		Find the difference between $\frac{2}{3}$ and $\frac{1}{3}$.
$\frac{2}{3}$	$\frac{2}{3}$	(a_4)
$\frac{1}{3}$	$-\frac{1}{3}$	How much greater is $\frac{2}{3}$ than $\frac{1}{3}$?
		(a_5)
		Two-thirds minus one-third, etc.

In a second sense Brueckner's Type (a) is not a simple thing. We must vary the combination used, even holding the Type (a) constant, as: $\frac{4}{5} - \frac{1}{5} = \frac{3}{5}$, $\frac{2}{3} - \frac{2}{3} = 0$, $\frac{4}{6} - \frac{3}{6} = \frac{1}{6}$ (which would have to come from $\frac{2}{3} - \frac{1}{2}$), etc.

When, especially in more complicated types, we consider other aspects of actual work not provided for in Brueckner's analysis, it is clear that his 58 types give a false simplicity to the facts.

In a third sense 58 types is not a beginning at analyzing what a total situation really is. Consider all 58 types with varying numbers set in varying verbal problems involving varying subtleties of language difficulties.

I am sure that when we consider the meaning of total situations and imply that we should teach via presenting all total situations, it is clear that we simply cannot practice the theory involved. To give one practice on each total situation would require a few years, and by the time we had given enough practice on each total situation to master it, one's life would be finished.

Relative to Alternative No. 1, I contend that in addition to being impossible it is also quite unnecessary. If children learned to respond to gross total situations only, it would be necessary. But children respond to elements in situations and generalize. Given enough experience with an element in varying situations, they then become able (within limits which are not exceeded by real situations) to respond to that element generally.

Even each one of the following six total situations varies from every other. All need not be taught because the child can transfer the common element learned in one to others.

6 ÷ 4	6 ÷ 4	6 ÷ 4
6 ÷ 4	6 ÷ 4	6 ÷ 4

Of course an element deeply buried in a new situation may not be responded to correctly if at all. This is why a child may be able to do a bit of drill work but not do exactly the same computation when the data are buried in a verbal problem.

All total situations which are useful cannot be presented. They do not need to be, since a child can transfer a mastery of elements in one situation to work upon the same element in another situation. This transfer is limited and varies with ability. Enough varying combinations must be taught to allow for generalization. The meaning of "enough" is unknown in most instances. Experimental work has determined its nature in a few instances and in the end will define its meaning in many if not all instances.

Of course no one really means that we must teach in terms of total situations. What is meant seems to be: teach some situations and assume that a great many others are enough like the one taught to take care of these others. But the joker here is: when are two situations enough alike so that knowing one we know the other also as a sort of extra booty?

Alternative No. 2 is the opposite of No. 1 and is as much an error as Alternative No. 1. Units learned by themselves may or

may not work together in various combinations. In the case of a genius in analytical thinking, they probably would work together automatically. In the case of children they certainly do not. That is why we must not only teach elements but teach them together in various combinations or various situations. We do teach total situations but we teach elements in varying combinations in this way. The main difference between animal and human learning is the human ability to distinguish elements in gross totals and respond to them correctly.

Much failure in the learning of children is due to the fact that we greatly overestimate the child's ability to use an element learned in one situation in another total situation. Because *we* see similarities and dissimilarities in a series of related total situations, we assume that the child does also. He often does not. To overcome this error "instructional material" in arithmetic is becoming more expansive, detailed, and replete with samples of the processes being taught.

The number of varying situations in which an element should appear during learning varies with the nature of the element, the complexities of the hierarchies in which it appears, and the power of learning possessed by the student. Of these very little is actually known at present. As a rule it is better to present too many varying situations that too few.

Alternative No. 3 is the theoretical basis of sound teaching as far as the problem covers teaching (there are other problems outside the range of this discussion.

Any mental function—hierarchy of skills, total ability, process, school subject or whatever name seems advisable—is a series of, or a combination of, elements. Complexities within the same general process vary one from the other in different amounts. Two complexes or total situations may be so much alike that a bright child knowing one can work the other, while a dull child cannot pick up their similarities and differences. That is why we must take into account individual differences in identifying elements to be learned, as well as differences in amounts of drill. It is both impossible and unnecessary to present all total situations in a subject to a child. Many are so closely related that, knowing one, the other can be solved through inferential thinking.

The vitals of sound teaching are, first, to identify all crucial elements which in varying combinations make up the mental functions to be learned; second, to combine these elements in many different ways on different levels of complexities so that a child will have learned a broad enough sampling of the total function to enable him to react correctly to other combinations which, although he has not been specifically taught these "other" total situations, are near enough like ones he has been taught to permit of inferential thinking. No other alternative theory is possible, unless huge amounts of time are available. No other alternative theory is needed. If children cannot do inferential thinking they cannot meet successfully any situation they have not been specifically taught. But they do and always have.

In the past we have sinned by teaching too much like Alternative No. 2. It is evident that Alternative No. 3 represents, I trust, the basis of teaching of drill construction and of drill analysis which the writer has practiced. It is also the basis of similar work by Brueckner even though he thinks he is using Alternative No. 1, as is evident from the quotation at the beginning of this article.

A NATURAL LEARNING ACTIVITY IN A SPECIAL CLASS

RUBY MINOR

Director of Kindergartens and Elementary Education, Berkeley, California

The following description illustrates the possibilities for learning that are available when classroom procedure is organized to include activities initiated by the pupils and carried to a satisfactory conclusion under the guidance of a well-informed and sympathetic teacher.

The activity herein described extended over several days in a special adjustment class of the Washington School. The eighteen pupils were of grades four and five, taught by Mrs. Annie Dolman Inskeep. The members of the class were engaged in other necessary school work during the time, but a definite part of each day was assigned to this "telephone activity." The study included oral and written English, alphabet and abbreviation practice, also reading, citizenship, manual training, hygiene and social adjustment.

This activity originated in a class discussion of how the *Winston Simplified Dictionary,* which the children were just beginning to use, was like a telephone directory. The children went home and examined their own, or their neighbor's, directory, and one child brought an old one for the class to see. Various children wanted to know if they could not have names to look up just as they looked up dictionary words. The teacher said that would be a good thing to do if they only had enough telephone directories for the whole class. The children offered to get old books from home, or to ask neighbors for them; one boy, whose father worked for the telephone company, secured several. About twelve of the eighteen children in the group participated in securing telephone directories.

The whole group took part in discussions about why new telephone directories are issued, what becomes of the old ones, the hygiene of clean books, etc. These questions for the most part originated with the children and arose during the free question period (a weekly period) or at recesses.

Twenty telephone directories in all were secured and these became an immediate incentive to know the alphabet in a "more usable" way, *i.e.,* to know what letter came before or after a given letter, how to judge about where to open a telephone directory or dictionary so as to be as near as possible to the letter wanted and not waste time fumbling.

The teacher and the children together read the "General Information for the Guidance of Telephone Users." Out of this reading there arose a desire to practice telephoning (many children of adjustment, opportunity, or special classes are so inhibited by fears, complexes, etc., that they do not learn to use the telephone). Some of the children wanted a room telephone, others who thought they could use a real telephone wanted to call the teacher up at her home. The latter were told at what time to call, and all discussed the making of room "play" telephones. It was decided to make these out of the wooden cores that come in wrapping paper.

Everyone in the class wrote a letter to a large neighborhood laundry asking for

some cores. The children proposed to choose the best letter by secret ballot. They also chose a boy who knew one of the employees of the laundry to deliver it.

Later, play telephones were made of wood in manual training time. Meanwhile the class looked up names of their own choosing and wrote the name, address, and telephone number in their English books. Sometimes, at their own request, this was done under time pressure. As the directory included both San Francisco and Oakland, as well as Berkeley, the children in groups or by twos discussed and often brought to the teacher questions about the colored page business directory, how to get an out-of-town number, why the names of some firms and offices were starred, why names were at the top of the page, etc.

Children called the teacher up at her home and told her just how they had looked the number up and got it without help.

When the telephones were finished there was class motivated work on the social courtesy of telephoning. The group discussed how the store, the home, or the dentist should be called up. The teacher tactfully kept this to the point and enabled the children to give helpful criticism of each other's efforts at telephoning. Later the class organized a central exchange and dramatized the entire procedure of calling a number, giving an order, and receiving the order. For example:

A pupil wishing to order cretonne for classroom curtains took down the receiver and called Berkeley 875. Another pupil represented the operator at Central Telephone Office. A third pupil represented the local operator at the switchboard of Hink's Department Store, while still another pupil represented the salesman in the draperies department. The call was "put through," prices were asked and quoted, the order was given, the order was taken and the bill filed. After this demonstration the class offered helpful suggestions for improvement.

Out of this project the following experiences grew: motivated letter writing, meeting a social situation (the collecting of directories, going to the laundry, using a neighbor's telephone), experience in the use of a telephone directory, the social procedure of telephoning, the use of a telephone business directory, how to find a physician's number, a store where a certain kind of goods is sold, etc. When the desire arose from the pupils themselves, the class visited the main telephone office.

This project has educative value since among its outcomes are: adjusting children to the useful life situation of the *intelligent* use of the telephone directory (as an adjunct it has deepened interest in dictionary work), ready command of oral and written language as used in relation to telephone procedure, speed in copying and reading telephone numbers and addresses, and an increase in poise, patience, and courtesy required in looking up numbers and getting the person wanted on the telephone. The outcomes of the manual training work involved were, in addition to the required skills, an increase in ability to persevere in a self-imposed task, ability to plan, and ability to assume responsibility for a desired outcome.

This project seemed so desirable to the children that a joyous, thoroughly motivated learr ing situation resulted.

A NEW RATING SCALE FOR PRACTICE TEACHING

CHARLES W. WADDELL
Director of Training Schools, University of California at Los Angeles

It is not proposed in this brief article to present in detail the arguments for and against the rating of teaching performance. It is not proposed to attempt to justify or decry the rating of teachers in public school service for purposes of promotion or dismissal. Neither do we wish to try to settle the debatable question, "Shall supervisors have anything to do with the rating of teachers in service?" We are here concerned solely with the problem of rating of the teaching capacity and performance of students in training as a means of preparing them for recommendation to public school service. What shall be done for them after that is not our present concern.

Two or three things are pertinent to our problem. First, supervised teaching is a recognized subject in the curriculum of all our normal schools, teachers' colleges, and many of our liberal arts colleges and universities as well. As such it is expected that the degree of success the student attains shall be estimated by those who give the training with at least as much accuracy and by the use of standards at least as definite, tangible, and reliable as those used in measuring the progress of students in the pursuit of any academic study. In the second place, it is right to expect that such judgments as are made shall indicate with a fair degree of accuracy the probable fitness of the student for the high service of teaching. In the third place, since supervised teaching is after all the real test of capacity and fitness, the record made of the teaching performance of the individual under training should have greater significance than any other factor in determining the desirability of recommending the student for certification and, if certificated, for appointment in the teaching service.

If this be true, the obligation to perfect the instruments by which the measurement of the student teacher and the student's teaching are to be taken rests heavily upon those whose business it is to give the training. If the means employed are haphazard, subjective, unstandardized, give too much weight to some factors and too little to others, are indefinite, uncertain, and not easily understood by the one who is being judged, the result is likely to be injustice to the student on the one hand or injustice to the state on the other—injustice to the student who is left without accurate knowledge of what specifically constitutes teaching success or failure; injustice to the student if there are not put into his hands the means of self-analysis and self-judgment; injustice to the state if students who lack in many particulars those traits and capacities or those abilities and skills without which one cannot give acceptable service are allowed to receive recommendation for certification for lack of proper instruments with which to measure the degree and the nature of their disabilities; injustice to the state again if we fail to provide supervisors with training and ability to use such instruments with skill and discretion.

For purposes of this discussion we assume that some form of rating scale is an indispensable instrument of accurate measurement of practice teaching ability. Many years of experience with and without such scales, and the study of thousands of ratings made with various scales, have left no

doubt in the mind of the writer on this question. That the use of a good scale gives a truer, more accurate, fairer, and more useful judgment of teaching than can be had without such an aid is a conviction of long standing. That it greatly improves the quality of supervision, is beyond dispute.

In the many scales that have appeared in recent years, however, the writer has been disappointed in certain particulars. This is in part due to the fact that many of them have had in mind the work of the public school teacher rather than that of the student teacher. But there are other and still more serious lacks that have driven the writer to turn his attention and that of his staff for several years to a study of our need for an improved scale for rating student teaching. The scale which appears at the end of this article is the result. The chief defects which we have sought to remedy are the lack of sufficient emphasis on the newer point of view in education and the newer procedures in teaching. If we are to train our students to teach by an activity or project procedure, we cannot judge them on a scale constructed for a formal drill or recitation type of teaching. If we hope to have our students learn to use the known laws of learning in their teaching, we must make it apparent that we expect to judge them upon those points. If we are to measure their classroom management in terms of the level of control they maintain instead of by the mere fact that they keep order, we must assure ourselves that they know the different levels of control, how children are taught to rise to the higher levels, and that they themselves are to be judged by the degree of their success in promoting the best type of control.

If the accompanying scale has a real contribution to make, it is that it suggests some new aims and objectives as to teaching methods and as to the criteria by which progressive teaching must be judged. We believe it sets before the student a rather definite group of worthy goals. We believe it gives the training teacher and supervisor an instrument by which to direct teaching along progressive lines. The supervisor or training teacher who controls or teaches by the methods of yesterday will not find it easy to use. It is not suitable to the judgment of that kind of teaching. The teacher or supervisor who is trying to master the newer techniques involved in the activity, project, or problem procedure and to make definite application of the laws of learning will find the problem of training and of judging student teaching from such a viewpoint must more easily handled than by the use of any scale that has so far appeared.

In conclusion it should be said that any such scale serves first the purpose of analysis and evaluation of the various elements of teaching performance. This scale we believe gives a reasonable weighting to the respective elements. The experience of those who have used it is that the rating is accurate and that personal bias and subjective judgment are somewhat offset by a conscientious use of the rating procedure involved. The scale is useful for self-rating and as a basis for conference following supervisory visitation. Finally, it must be said that for use of an appointment office the written characterization provided for on the first page is still quite essential. The writing of such a characterization is made relatively simple by the material at hand in the scale itself after it has been completely checked. It is the hope of the writer that this scale will enable student teachers to form the habit of judging their own work from a modern, progressive viewpoint. It is his conviction that it offers a stimulus as well as a guide to training teachers toward the training of their students in the best procedures that progressive education has to offer.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

RATING SCALE FOR PRACTICE TEACHING

Student Teacher: Smith (Last name) Constance (First name) Carter (Middle name)

Permanent Address: 1521 Blank Street Los Angeles

Curriculum: Junior High School Class: Sr.High Teaching Course: J191-B Units: 5

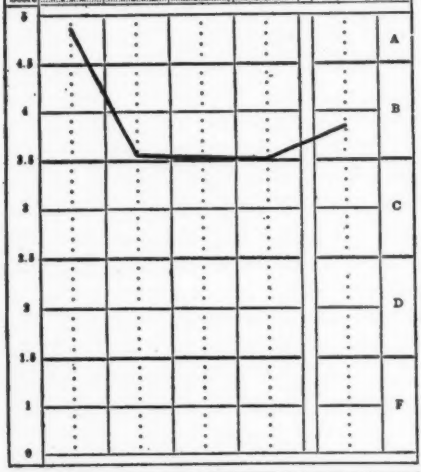
Practice Teaching done in: University Training School

Grade: 7 and 8 Subjects: History, Geography, Civics

Dates: From September 19, 1927 To February 3, 1928

Previous teaching: None

SUMMARY OF RATINGS AND PROFILE						
	Personal Qualities	Academic Professional	Class Management	Teaching Skill	Combined Average	Final Grade
Av'ge Score	4.85	3.55	3.53	3.50	3.85	B-



Characterization:

Attractive in person and charming in manner Miss Smith has also common sense, good all-round ability and an unusual combination of all those personal qualities which make for success in teaching.

During the period of her training she has shown the capacity to progress satisfactorily in overcoming the faults common to youth and inexperience. She gives much time and thought to her work. She is greatly interested in the children as individuals. She has done much to promote the social spirit among her pupils and her associates. She has the qualities and ideals which insure her making an invaluable contribution to the life of any community in which she may work.

Miss Smith brings to her teaching an exceptional preparation in history. She also has a good conception of the geographic influences affecting our early Colonial life which she succeeds in making clear to her pupils.

Miss Smith shows the potentialities of an excellent teacher of the Social Sciences in the Junior High School.

Rated by: Esther E. Trainor Training Teacher

Helen B. Keller Supervisor

Date of rating: February 3, 1928

To the Training Teacher: It is important that every item on the above form be filled in. The verbal characterization is an indispensable part of your report. Write the best recommendation your rating justifies in a form which can be quoted verbatim by the Appointment Secretary. See the last page for explicit directions for checking your ratings.

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QUALITIES	Failure	Pass	Average	Strong	Superior	Score	Percentage of those passing
		Low 10%	Next 50%	Next 30%	High 10%		
Score value	1	2	3	4	5		Remarks
I. PERSONAL QUALITIES							
A. Physical Qualities:							
1. General health, strength, vigor, vitality				✓		4	
2. Voice: timbre, pitch, articulation					✓	5	
3. Neatness and cleanliness, appropriateness of dress					✓	5	
4. General appearance and posture					✓	5	
B. Mental and Temperamental Qualities:							
1. General intelligence				✓		4	
2. Common sense, adaptability					✓	5	
3. Initiative, resourcefulness, self-reliance					✓	5	
4. Sense of humor					✓	5	
5. Enthusiasm and optimism				✓		4	
6. Force without offensive aggressiveness					✓	5	
C. Social Qualities:							
1. Likableness—attraction of people					✓	5	
2. Spirit of cooperation and team work, loyalty					✓	5	
3. Response to constructive criticism and to opinions of others					✓	5	
4. Courtesy and tact in all relationships					✓	5	
5. Poise					✓	5	
6. Capacity for leadership					✓	5	
D. Character Qualities:							
1. Intellectual and moral honesty, sincerity					✓	5	
2. Sympathy					✓	5	
3. Promptness, regularity, dependability					✓	5	
4. Industry and perseverance					✓	5	
Summary of Checks and Scores I				3	17	97	*Ave. Score I* 4.85
II. ACADEMIC AND PROFESSIONAL BACKGROUND							
A. Professional insight and outlook. *To what extent does the teacher have.*							
1. A real understanding of the accepted aims of education?				✓		4	
2. Command of the laws of child learning and growth?			✓			3	
3. Practical knowledge of approved standards of work?			✓			3	
B. Thoroughness of cultural and academic preparation. *To what extent does the teacher have:*							
1. A satisfactory background of general culture?				✓		4	
2. Knowledge of subject-matter to be taught?					✓	5	
3. Mastery of the elementary skills in: a. Reading?				✓		4	
b. Arithmetic?							
c. Written English (incl. spelling)?							
d. Correct, adequate oral expression?							
C. Thoroughness of immediate preparation. *To what extent does the teacher:*							
1. Formulate aims clearly and plan adequately?			✓			3	
2. Provide necessary illustrative and work materials?			✓			3	
3. Make continuous improvement in daily preparation?			✓			3	
Summary of Checks and Scores II			5	3	1	32	*Ave. Score II* 3.55
III. CLASSROOM MANAGEMENT							
A. Management of external physical conditions. *How well does the teacher care for:*							
1. Heat, light, ventilation, orderliness of room?			✓			3	
2. The artistic arrangement of room?			✓			3	
3. Display of incentives—pupil work, graphs, charts, etc.?				✓		4	
4. Books, tools, materials and equipment?			✓			3	
5. Clerical duties, reports and records?					✓	5	

See second page.

QUALITIES	Failure	Pass	Average	Strong	Superior	Score	Percentage of those passing
		Low 10%	Next 50%	Next 30%	High 10%		
~ *Score Value*	1	2	3	4	5		Remarks
III. CLASSROOM MANAGEMENT (*Continued*)							
B. Attention to physical and mental hygiene.							
To what degree does the teacher:							
1. Establish good health habits, including posture?			✓			3	
2. Establish orderly and economical habits of work?				✓		4	
3. Maintain stable and consistent requirements?				✓		4	
4. Make adaptations for physical and mental disabilities?			✓			3	
5. Secure progressive control of impulses?				✓		4	
C. Control of children.							
To what degree does the teacher.							
1. Know the levels of control found in a democracy: (1) Coercion; (2) Ridicule; (3) Training or habituation; (4) Popular disapproval; (5) Popular approval; (6) Reason; (7) Self-control?			✓			3	
2. Sense the level on which each child is living?			✓			3	
3. Use methods of control which raise the pupils' level of behavior?			✓			3	
4. Anticipate and forestall potential disciplinary problems?				✓		4	
5. Make good conduct satisfying and wrong conduct dissatisfying?				✓		4	
Summary of Checks and Scores III			8	6	1	53	*Ave. Score III* 3.53
IV TEACHING SKILL							
A. Skill in the use of the Laws of Learning.							
"Readiness"—To what extent does the teacher:							
1. Ascertain capacities, experience, interests and needs of children?				✓		4	
2. Make pupils feel the need of things to be learned?				✓		4	
3. Maintain in pupils a mind set toward purpose?				✓		4	
4. Aid pupils to state such purposes in some definite, clear way?				✓		4	
"Exercise"—To what extent does the teacher:							
1. Aid children in planning for carrying out of purposes?			✓			3	
2. Aid pupils in using economical procedures in executing purposes?			✓			3	
3. Maintain interest and effort throughout the necessary practice periods?			✓			3	
"Effect"—To what extent does the teacher:							
1. Get the pupils to judge their own work well?			✓			3	
2. Get pupils to find satisfaction in accomplishment of purposes?			✓			3	
3. See that pupils find dissatisfaction in undesirable responses?		✓				2	
4. Constantly encourage and commend effort?			✓			3	
B. Skill in the use of Purposeful Activity.							
To what extent does the teacher:							
1. See that chosen purposes are gripping, challenging and worthwhile?		✓				2	
2. See that purposes are possible and feasible?			✓			3	
3. See that they are capable of enriching the lives of children—that they have "leading on" qualities?		✓				2	
4. See that each one differs enough from the preceding to give necessary variation and scope?			✓			3	
What degree of skill does the teacher possess in handling the technique of:							
1. A lesson, where the child's purpose is to embody an idea in concrete form?			✓			3	
2. An appreciation lesson—where children's purpose is to enjoy some aesthetic experience?				✓		4	
A problem-solving lesson—where purpose is to solve some intellectual difficulty?				✓		4	
4. A drill lesson—where purpose is to make automatic a skill or some specific bit of learning?				✓		4	
5. Questioning?			✓			3	
C. Skill in Securing and Checking Results.							
To what extent has the teacher:							
1. Improved the pupils' study habits?				✓		4	
2. Secured a gain in pupil self-direction and initiative?				✓		4	
3. Secured improvement in pupil participation, earnestness and industry?				✓		4	
4. Promoted progress by use of standard and informal tests?					✓	5	
5. Removed deficiencies by remedial measures?					✓	5	
6. Maintained a wholesome, happy working atmosphere?					✓	5	
Summary of Checks and Scores IV		3	10	10	3	91	*Ave. Score IV* 3.50

GENERAL DIRECTIONS

This scale provides for the ranking of student teachers in five groups by means of separate ratings on a large number of qualities essential to success in teaching. Four of these groups are passing; the lowest is unsatisfactory or failing.

The number of probable failures is not definitely fixed by rule. Failure is to be taken as indicating that the student is so deficient in accomplishment or promise or both that there is small chance of his reaching a standard of average accomplishment in the teaching profession.

The rules of the University require that those who attain passing grades shall, in the long run, be distributed into four groups in a rather definite way.

As many as 10 out of every 100 may be rated "Superior." This rating is to be kept for students of very outstanding accomplishment and promise.

Not less than 50 of every 100 students must inevitably be rated "Average" if a proper standard is maintained. This group represents the rank and file.

Approximately 10 in every 100 who pass will rate less than "Average." They constitute the "Pass" group. Such students must usually expect to take more than the usual amount of training in order to raise their rating.

Of the remainder something like 30 in 100 may be rated between the "Superior" and the "Average" as "Strong."

It is expected that all Training Teachers will see to it that a standard approximating these percentages is maintained for every 100 students rated.

SAMPLE RATING

	Failure	Pass	Average	Strong	Superior	Score	Remarks
		Low 10%	Next 50%	Next 30%	High 10%		
Score Value	1	2	3	4	5		
C. Thoroughness of immediate preparation. *To what extent does the teacher:*							
1. Formulate aims clearly and plan definitely?			√			3	Improving
2. Provide necessary illustrative and work materials?		√				2	Not always
3. Make continuous improvement in daily preparation?				√		4	
Summary of Checks and Scores 11		1	1	1		9	*Ave. Score* 3

PROCEDURE

1. Rate the teacher on each separate item for which sufficient data are available. Do this by placing a check mark (√) in the column which properly indicates your judgment of the teacher's ability on each point in turn.

2. Count the check marks in each column and enter the number at the foot of the column opposite the "Summary of Checks and Scores."

3. Enter at the right in the column headed "Score" the value of the check for each item as indicated at the top of the respective columns. (See sample rating.)

4. Add all the scores under heading I and enter the sum at the foot of the column. Divide this sum by the sum of the check marks you have made under heading I. Carry all computations to two decimal places. Enter the quotient at the right after Ave. Score I. Follow the same procedure for the other main headings.

5. Carry over the average score for each main heading and enter it at the head of the profile column on page 1.

6. Compute the average of the four scores and enter under Combined Average.

7. Locate in each column the point corresponding to the average score for that column.

8. Draw the profile by joining these points by lines.

9. The final letter grade is fixed by the point in the "Combined Average" column at which the profile ends. Enter the grade at the top of the column.

10. Go over your final check with your general supervisor, especially in doubtful cases, before turning in reports.

11. Make preliminary checks lightly in pencil at the mid-term periods. Final reports are to be typed or written in ink.

USES OF SCALE

1. As a guide to analysis of the student's work during the training period.
2. As a guide to self-analysis by student-teachers.
3. As a basis for conference with the student.
4. As a final report on student teaching for use of the Appointment Secretary.

NOTE: This scale is the culmination of a long period of experience and critical study. In preparing the material in its present form the experience, cooperation and expert criticism of the general supervisory staff of the Training Schools of the University of California at Los Angeles were used to the fullest possible extent.

CHARLES W. WADDELL,
Director of Training Schools.

A SUPERVISOR OF ARITHMETIC SKETCHES A TYPICAL DAY'S WORK

LOU BELLE STEVENS
Supervisor of Arithmetic, New Rochelle, New York

What does the classroom teacher, overburdened with the number of things which every day requires of her, want from the supervisor of arithmetic? Every teacher will answer this question with the one word, "help."

Now "help" may mean a different thing to each individual teacher. To one, perhaps inexperienced in the work, it may mean a lesson with her class showing the habits which have been started in the fundamental processes and which she is expected to carry on and perfect.

To another, a suggestive device for further drill on a difficulty may mean the awakening of interest on the part of the pupils and an inspiration to the teacher to take new hold on the work.

To another, who has tried to cover a certain part of the work—long division, for instance—a test prepared by another mind may be a great aid in showing her how well she has accomplished her aim.

And still another may need nothing so much as she does that some one shall notice signs of growth and say the deserved word of encouragement and approval.

To all of these needs, and many others, this supervisor tried in one short day to minister.

It was 8:55 and a teacher, meeting the supervisor in the hall, said, "I hope that you are coming to my class today for I need help. My pupils know the addition facts; I have taught the principle of adding by endings, using endings the sum of which is less than 10. Will you present the next step, if you come in and find us ready for it?" A teacher so definite as this one showed herself to be deserves the best that the supervisor has to give.

Five minutes of work with these pupils is enough to prove that she has done well what she has attempted to teach. The pupils respond correctly and quite readily to the sums as examples like the following are written on the blackboard:

5	7	4	8	
21	32	12	11	etc.

Now the supervisor shows the flash card

7
9

and asks the pupils to look for these figures as endings in the work which she writes on the board:

7	7	9	9	
19	29	37	17	etc.

Using any objects available, the pupils count 19 and 7 more to find that the sum is 26; 29 and 7 more to find that the sum is 36.

Then she shows a shorter and better way than counting to find these sums, as, "Because 7 and 9 are 16, we think the 6 of 16 under the 9 and carry the 1 to the next column to make the whole sum 36." Ten minutes more and the children have grasped the whole principle of adding such numbers as 18 and 9; 26 and 8; 13 and 7, etc. Then follow five minutes more of

quiet suggestion to the teacher about future work:

1. From now on, be sure to drill together, *i.e.*, in the same period, those combinations in which the sum of the endings is 10 or more as well as those in which the sum is 9 or less (for example, 14 and 9 as well as 14 and 5). Otherwise your pupils will tend to become mechanical instead of thoughtful and accurate.

2. Limit the two-figure numbers in this drill to the teens, 20's and 30's because the columns which the children of this grade will add seldom will total more than numbers in the 40's.

3. Having trained the eye to correct response to combinations similar to

9	9	19	13
26	31	9	6

train the ear to hear these same combinations. This will be a great aid in column addition.

4. In the ear training, pay special attention to the endings of the "teens." They are most difficult to hear because they do not sound as they look. For example, in the number 26 the ending is plainly "6" but in 16 the pupils hears, as an ending, not the "6" but "teen."

5. Avoid any pencil work at this time lest the pupils make habits of counting rather than relying on endings to obtain sums.

A peep into a high second grade found the pupils happy in a scoring game which gives practice in every phase of column addition.

Five children stand and the teacher dictates such a combination as, "26 and 5." If the pupil addressed says "31," the other pupils say, "Right," and the teacher writes "31" on the blackboard. Should he be unable to answer correctly, the first time, the whole example is written on the board and later the child is helped to respond with the correct sum.

When five individuals have had an opportunity to give a sum, all of the pupils add silently the numbers which have been written in a column. This sum is checked by some child who adds aloud. Five other children now stand and the game continues for exactly five minutes daily. The score for the day is found and registered; on Friday these scores are added until finally they have the score for the month. It was this, "a number of 4 figures," of which these children were so proud and which they wished to show to the supervisor.

A third year class, below the average in native capacity, is the next on the program. These children are working on short division, trying to use 2, 3, 4, 5 as divisors. They never can do work equal to that of a normal third grade and it helps the teacher to know that the supervisor recognizes this fact.

First all of the boys, then all of the girls go to the blackboard. Each child writes a number containing three figures. Each is given a divisor suited to his ability and he tries hard to show that he is gaining power. As the pupils help to correct each piece of work, every possible encouragement is given to individual pupils.

It is now 9:35 and a third year class just beginning the use of a textbook in arithmetic next claims the attention of the supervisor. The teacher, too, is meeting this experience for the first time and appreciates being shown how different is an arithmetic from every book which the little child has ever used. Too often the child misses the whole point of the lesson because the teacher takes for granted that he knows, as well as she does, what it is all about.

The opportunity which is afforded to teach thought-getting and silent reading through the directions in an arithmetic is alone of sufficient value to warrant putting a suitable text into the hands of every third year pupil.

For fifteen minutes, a page on which appears a price list of groceries supplies material for a silent reading lesson, an exercise in oral English, and the foundation

for all future study of arithmetic from a text.

A sixth year class is just beginning to learn the aliquot parts of 100 with their equivalents as per cents. They think that they know them all. "But can you use them?" asks the supervisor.

Whoever has taught percentage problems knows that the great difficulty of the pupil is to answer the particular question which is asked in the problem. So the wise teacher begins now, while the new idea of percentage is so full of interest for the pupil, to train him to center his attention on the thought of the problem and to answer exactly the question which is asked.

These boys and girls are anxious for a test, which is supplied by requiring oral answers to questions similar to the following:

1. In this row of chairs (6), what per cent are occupied by boys?
2. What per cent of the windows in this room are open?
3. Of 20 spelling words, Tom missed 5. What was his mark?

Material which is present in the room or with which the pupils are very familiar may be used as the basis for numberless similar problems.

Having aroused their interest to see percentage possibilities all about them, the supervisor requests them, as an English lesson, to prepare for her some original problems in percentage to be used in another class in the city as a means of testing the power of those pupils to use the aliquot parts of 100 as per cents.

The pupils of a fifth grade class are very proud to tell that they are studying division of fractions. In answer to the supervisor's request that each shall think of an example in which a mixed number is to be divided by a fraction, one boy writes upon the board, $8\frac{2}{3} \div \frac{7}{8}$.

The teacher had taught them to invert the divisor and multiply. A few questions brought out the fact that these two things, done in the order indicated below, would make the work short and save errors, and the following was left on the board as a guide in future work:

1. Change the sign to x.
2. Invert the divisor.

While these pupils worked, on a sheet which had previously been prepared on the mimeograph, four examples in long division (12 minutes), the following suggestions were given to the teacher:

1. Give special attention to inverting the divisor in cases of which the following are types:

$$\frac{7}{8} \qquad \frac{1}{4} \qquad 4 \qquad 4\frac{1}{4}$$

You might take any set of drill examples on division of fractions from your text or put a set of such examples on a mimeographed sheet or on the blackboard and have each one read as it would appear after the two steps mentioned above had been taken, as:

$$\frac{9}{10} \div \frac{7}{8} = \text{(child reads) } \frac{9}{10} \times \frac{8}{7}$$

$$3\frac{3}{4} \div \frac{1}{4} = \text{(child reads) } \frac{15}{4} \times \frac{4}{1}$$

$$1\frac{7}{8} \div 4 = \text{(child reads) } \frac{15}{8} \times \frac{1}{4}$$

$$1\frac{7}{8} \div 4\frac{1}{4} = \text{(child reads) } \frac{15}{8} \times \frac{4}{17}$$

Because the mixed number must first be changed to a fraction and then inverted, this type needs most drill, but pupils delight in gaining skill to do this mentally.

It helps to call the pupils' attention to the fact that, after the divisor has been inverted, the original denominator will have become the numerator.

2. After the process of work is the cause of no further difficulty, give the pupils

much practice in simply selecting the divisor in thought problems involving division of fractions.

3. Prove to them that it is not true, as many pupils think, that the smaller of two numbers is always the divisor. For example: $\frac{3}{4}$ of an apple may be divided between two persons, which would be shown as follows: $\frac{3}{4} \div 2 = \frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$. Show them also that, contrary to their experience with whole numbers, the quotient may be larger than the dividend, and through concrete experiences let them see why this is true. For example: 6 apples may be used to give ½ apple to each boy, as $6 \div \frac{1}{2} = 6 \times \frac{2}{1} = 12$ (the number of boys who receive ½ apple each).

The papers in long division are examined at noon and the class is made happy when it is announced that 16 pupils had 100 per cent and 12 had made but one error each. The six pupils who made two errors each receive a private word of suggestion and to the teacher only does the supervisor speak of the three children who show little power in this process. (That percentage of failures is apt to be in any class and this fact should not be allowed to limit the joy of success which the class has a right to feel.)

At the time of the previous visit to this building, a beginning fourth year class had been started in multiplying mentally any two-figure number by any single digit, as, 2×21, 4×23, etc. They understood that this exercise was preparation for long division. Since they had acquired power in doing this mental multiplication, the promise of the first lesson in long division was made good.

Their eagerness for this experience was no small factor in the success of the lesson. In fifteen minutes of undivided attention, 35 pupils saw their first demonstration of how to work examples in long division. They had opportunity, under the teacher's guidance, to use the mental multiplication, as the quotient figures were estimated before being written. They were allowed to do necessary work in short division and subtraction and were later guided as they followed through in their textbook a type example with its explanations.

On the blackboard was left for their guidance in future work the following:

STEPS IN LONG DIVISION

1. Divide
2. Multiply (mentally)
3. Compare (product with partial dividend before writing either it or the quotient figure)
4. Subtract
5. Compare (remainder with divisor)
6. Bring down next figure

which had been tabulated as the examples were worked.

At the end of the session the following suggestions were given to the teacher:

1. Guide the pupil until what to do next is no longer a difficulty. Keep before him the list of steps and make him conscious of taking each one, especially No. 3 and No. 5. Do much oral work. Recall that in subtraction examples the larger numbers were always "on top"; also that the remainder, in short division, was always smaller than the divisor.
2. Select your examples so as to introduce but one difficulty at a time (many text books have done this selecting for the teacher) and teach each new difficulty carefully before the pupil is allowed to work independently. Make only correct habits.
3. Allow a pupil to work independently only after he has proven to you by oral work that he has correct habits of attack. A few specially apt pupils in every class can soon help to teach

the slower ones, until the majority are able to go ahead independently on the types of examples which have been taught. Then I hope that you will plan some contract work so that each pupil may progress at his own rate, according to his power.

4. For a long time, measure your success in teaching long division, as well as the power of the children, in terms of correct habits of work. Skill will come with practice but only if correct habits pervade the practice.

Before the end of the session there is time for a short visit to a third grade composed of pupils of relatively high ability. Their lesson (about 10 minutes) consists of showing that they are able to pass quickly from one operation to another. Some 2-figure and 3-figure numbers are written in a column on the board. These are added mentally by all and the sum recorded. Then one pupil checks by adding aloud, while all follow him silently. His name is written above this example and one in short division is worked by another pupil. Then follows one in subtraction and another in multiplication.

In the remaining five minutes each pupil reads silently, from his book, and some one gives a correct answer to each of five problems. In this exercise stress is put upon thought-getting through silent reading and response to the exact question asked. Only good English statements are accepted as correct answers.

The first work of the afternoon is with a sixth grade. Once a week, these pupils work for 20 minutes on a unit of a printed Work Book which provides needed practice on review work.

The teacher is not satisfied with the results obtained by having each pupil mark his own work as she furnishes the correct answers. Some pupils seem not to see the value of being sure that every example is correctly marked in order that each person's graph may tell the truth about his record and growth. At the teacher's request today, the supervisor reads the correct answers and, as an onlooker, it is easy for the teacher to discern which are the few pupils who need help to learn how to mark their books correctly.

The next class is a fifth grade, just beginning fractions. As preparation for the study of formal fractions, these pupils have had many concrete experiences with halves, thirds, fourths, eighths, etc., through the yard stick, the scale, the clock, the foot rule, dry and liquid measures. Also each child, under the teacher's guidance, has prepared for his own use a set of slips of paper which show the whole unit as well as a like unit divided into halves, another into fourths, and another into eighths.

For the lesson period these slips are arranged in orderly fashion at the side of the table top, and the pupils handle them, at the teacher's dictation, to actually add and subtract fractional parts. The knowledge gained through these experiences is drilled by the use of flash cards containing the most useful combinations of fractions. Incidentally the pupils learn to express fractions in their lowest terms or as mixed numbers. They realize that people say ½ yard but not ⅔ yard, also 1¼ pounds, not ⅝ pounds.

For a few minutes the pupils write answers as the teacher dictates examples similar to these: add ½ and ⅛; add ¾ and ½; subtract ¼ from ¾; ¼ from 1, etc.

These pupils have been having contests in long division with the fifth and sixth grades. Therefore they are delighted to be given a paper exactly like the one which these higher classes used this morning and even more pleased to find, after recess, that their results compare very favorably with those of the higher classes.

The suggestions to this teacher were concerning the work in formal addition of mixed numbers. The particular form used in the schools of our city

$$\begin{array}{l|l} 6\frac{1}{3} & \frac{4}{12} \\ 9\frac{3}{4} & \frac{9}{12} \\ 7\frac{5}{6} & \frac{10}{12} \\ \hline 23\frac{11}{12} & \frac{23}{12}=1\frac{11}{12} \end{array}$$

(we try to have this uniform) was shown and emphasis laid upon the necessity of making correct habits before pupils were allowed to work independently.

One more class—an advanced fourth grade—must try the long division test; the posting, on the bulletin board, of the results in the four classes is a great stimulus for individual practice to prepare for the similar test to be given two weeks hence.

The last visit of the day is to a second year class engaged in learning the addition facts. They know the 1's, 10's, 0's, 2's, and 9's. Two days before, as an experiment, the teacher has hung in their places on the wall, the cards containing the combinations with 4, with answers. She has given to each child similar small cards without answers. This is interesting.

"Does anyone, without looking at the wall cards, know one with 4 on it?" John does. "4 and 8 are 12," says he.

When he is invited to stand before the class, Jane quickly says, "4 and 7 are 11," and joins him.

Soon there is, with these children, a child to represent each combination with 4.

"Now you are ready to learn a new game," says the supervisor. A short talk about an echo and the children are soon happily playing the "Echo Game."

John stands in front of the class and says, "4 and 8 are 12." Those in their seats say, "8 and 4 are 12." Jane says, "4 and 7 are 11" and those in their seats say, "7 and 4 are 11." The teacher discovers, from the hesitancy of some, that she needs to teach again the idea of the reverse of each fact. She has been taking too much for granted. The knowledge of "6 and 4 are 10" does not necessarily imply the knowledge of the fact that "4 and 6 are 10."

An after-school conference was held with a teacher of a third grade whose pupils, of high mental ability, are showing results to be expected of them. Could she not organize some activity which would give an enriched program in arithmetic and also motivate work in other required subjects?

This question revealed that already the children are preparing money made of pasteboard, covered with tin-foil, with which they are going to learn to make change. Then they are planning to build a grocery in their classroom and play store.

From this experience the teacher plans to:

1. Teach reading and writing of numbers that mean money.
2. Teach making of simple sales slips.
3. Practice making change.
4. Practice the processes of multiplication, addition, subtraction, with stress on the necessity for perfect accuracy.
5. Teach what constitute good manners in a store.
6. Teach observation of and good judgment about prices.
7. Practice clear enunciation and good English.
8. Provide practice in both oral and written English.

The supervisor's work is not finished until, in a retrospect of the day, she records about the work of each class a note which will enable her to pick up the threads upon the occasion of her next visit.

THE CLEARING HOUSE

A MEDITERRANEAN CRUISE[1]

Cruising the Mediterranean in mid-winter may be a prospect far in the distance for most of our sixth grade pupils, but it is usually very close to their desires.

Interest in the project, which was worked out in the McCoy School, Kansas City, Missouri, was aroused by placing suggestive material on the library table. The teacher secured all available literature from various steamship offices, and the children were soon bringing in their own cruise books and pamphlets.

The class, voting unanimously to take the imaginary trip, was confronted with the selection of a tour. They discussed: (1) advantages of traveling in a group, (2) routes, (3) time, (4) cost.

Being of a conservative and democratic nature, they decided to travel second-class. George stated his reason thus, "There's not much difference in the cost, but I could buy a few more things and the people would be just as congenial."

They were next concerned with passports, and anxiety prevailed until Ethelyn brought one to school. After careful consideration and study, each pupil set about making a copy for himself. The following procedure was carried out in general:

1. The passport was examined by each pupil.
2. Actual printing was practiced in art class.
3. The study of the wording of the passport was done in language.
4. In arithmetic, in connection with the writing of checks, travelers' checks were discussed.
5. During a geography period the class listed each country they expected to visit, as that information was needed on the passport.
6. In the writing period came the realization of the importance of one's signature as well as a study of the letter formation used in the various names of the countries.
7. New interest in photography came as a result of the need of a picture for the passport.
8. Their first experience with the idea of a personal description tended to develop a keener sense of observation of the persons and things about them.

With the completion of the passports came new problems, chiefly those discovered in a health lesson. Everyone readily agreed to visit his fictitious physician in order to take the serum treatments that would protect him from the eye diseases of Egypt as well as the other diseases common in southern Europe.

Also in connection with the health work, the problem of clothing and luggage was considered. Eloise said, "Everyone I know who has been to Europe says that a trunk is always in the way when traveling in the interior." A quick-witted boy replied, "A trip to Europe is not like a Mediterranean cruise. In going to Europe one soon leaves the boat and heavy luggage must be sent by train from one city to another. In the cruise you make the boat your real headquarters, coming back to it

[1] President G. W. Diemer of Teachers College, Kansas City, who submitted this article, has appended to it the following notation:

"Miss Mildred Letton carried out the project described during her first year after graduation from Teachers College of Kansas City. Under the plan used in Kansas City, this was the period of probationary service, during which time she was under the supervision of the College. The project illustrates the possibilities of teaching Geography with a high degree of interest and purpose and a maximum of desirable learnings—provided the teacher has vision, zeal, and leadership."

after every excursion. I think that a trunk in one's stateroom would not prove bothersome. I shall take mine." Individuals used their best judgment and did as they liked. As to the type of clothing, it was decided that a few heavy wraps for stormy days and cool nights aboard ship would be needed as well as summer clothing of average weight.

But one cannot reach New York without some means of transportation. This introduced the consideration of train schedules and fares. Doris called the Union Station and reported to the class. They set the date for their departure in order to arrive in New York in ample time to board the boat. Hotels in the cities along the route were learned through a study of newspapers from those cities. Joy, who had visited a large Chicago hotel, described it for the others.

No such extensive trip could be taken without a provision for some means of recalling its most interesting phases; therefore, Geraldine asked one day, "Why couldn't we keep diaries and write down events worth remembering?" This idea was accepted as enthusiastically by the boys as by the girls. The "diaries" were most often in the form of small five-cent notebooks which took the place of their regular geography notebooks for this project.

Upon arrival in New York, excitement became apparent concerning the ship, *Carinthia*. While this desire for information was at its height the teacher secured a large diagram of a ship and placed it on the wall. The young travelers soon found their rooms and each marked his name in the correct place on the diagram to denote his reservation of that room. Charles, as spokesman for the athletic boys, came in one day inquiring, "Miss Letton, may Willie, George, Rex, Maurice and I have the rooms nearest the swimming pool?" As the time for sailing drew near, more attention was given to the location of the lounges, dining-room, sun-deck, swimming pool, etc.

A few days before sailing, the pupils decided to ask another class to write *Bon voyage* messages to them. In that way each member of the party was assured of relief from boredom during the crossing. Of equal importance was the discussion of seasickness. The most popular remedy proved to be lemons. Roy remarked, "We'll have to become accustomed to the water since we'll be at sea many days."

By carefully watching the "Movements of Ocean Steamers" column in a local newspaper the class considered itself on its way when Lorene found the announcement of the sailing of the *Carinthia*.

The first stop was at Madeira and, feeling the need for some knowledge of the place, the tourists decided to consult the captain. The "captain" in this case, as in all others during the trip, proved to be a cruise guide book, which made possible a more modern view of conditions than our textbooks often afforded. As we traveled farther, those children who had special reports acted as guides for specific parts of the trip. Myrtle gave an especially interesting one on the trip to Mt. Vesuvius.

To outline the route briefly, after leaving Funchal, Madeira, the members of the cruise visited Gibraltar, Malta, Greece, Athens, Egypt, the Holy Land, Cyprus, Turkey (especially Constantinople), Corfu, Jugo-Slavia, Italy (Venice, Florence, Rome, Naples), Algeria, France (Monte Carlo, Nice, Paris, Cherbourg), and Southampton, England, before returning to New York.

Upon reaching Venice, everyone decided that Italy was especially interesting, so instead of traveling around the Italian boot on the *Carinthia*, a side trip was taken through the country, meeting the regular

cruise again at Rome. This gave practical knowledge of the expense and plans necessary for a side trip.

Soon after their "arrival" upon foreign soil the children decided that they would not be true travelers without purchasing souvenirs. But what should they buy and how could they represent their purchases? It was at last decided that every pupil would bring a bar of soap to school and carve the articles he or she desired to bring home. After experimenting, it was found that the fresher the soap the better, since it did not then chip so easily. Also, the whiter the soap the more it resembled marble. The latter effect may be had also by dipping the finished articles in paraffin.

In spelling class one day, during the period when Greece was being visited, the word "columns" was mentioned, the types of Grecian columns were discussed, and from this discussion developed one part of the exhibit of "Souvenirs from Our Mediterranean Cruise." Many of the children made columns, beginning by carving out the fluted sides, then trying the Doric order, the Ionic, and later the Corinthian. Relief was also explained, George making a Grecian maiden showing low relief and Frances carving an Italian head representing high relief work. Vernon, who is interested in history and coin collecting, secured an ancient history book and carved out several old Roman coins.

In connection with a study of art objects in Kansas City, attention was being given, at the time, to the civic pride and appreciation which the good citizen should manifest. Among these artistic works were several Italian well-heads and bird baths, of which Duane and Jean made copies in soap.

The making of vases proved very popular and some of the more ambitious children painted theirs successfully with water colors. Equally popular, especially with the boys, were the Italian gondolas.

Among the many other souvenirs were Roman benches, Grecian tablets from Athens, shrines from Pompeii, a Grecian temple from Athens, an Italian picture frame from Florence, a Roman arch along the Appian Way, busts from the ruins of Pompeii, books and book ends (showing Gothic influence), the Leaning Tower of Pisa, an Egyptian mummy case, and the head of Caius Julius Cæsar.

Recalling that before they began their trip the class had received steamer letters from another room, they decided, while in Italy, to let their schoolmates know what appealed to them personally on this tour. These letters, a phase of the language work, acted as a splendid check-up in geography although the children were entirely unaware of it.

Below is a portion quoted from one of the letters:

March 6th. Today we arrived in Rome. This morning we visited the Vatican and after luncheon we shall see St. Peter's. Later we are going to Pompeii. I'm anxious to see it; I've heard so much about it.

I bought a Mohammedan prayer rug as you asked. It is quite lovely. In Cairo I got an Egyptian dagger for a letter opener. I bought a very pretty ring in Florence. I am wearing it now.

I wish you could be with us, for this trip is certainly an education to me.

Please write, as I enjoy receiving your letters.—Doris.

Here, too, is an example of notes taken from several of the diaries:

Feb. 8: I reached Athens, Greece, today. It is a five mile drive from the harbor to Athens. I did not know that the automobiles in which we went would be so modern. They were even American made. Our party took lunch in Athens and later visited the Acropolis, which possesses the ruins of the Parthenon, one of

the most beautiful of ancient buildings. The University of Athens enrolls several thousand students. I bought a few souvenirs in the evening as we were leaving, because the peddlers had lowered their prices since the morning.—Geraldine.

March 11th. We arrived in Algiers this morning. Algiers is really "two cities." We find French and Egyptian people here. The former live along the coast. The streets are very wide; they remind a person of Paris. They are bordered by outdoor cafes; we had luncheon at one of them. The shops here are very small. In the afternoon we took an automobile ride through the city. We left for Nice, France, this evening. We will be on the Mediterranean all day tomorrow.—Vera.

March 19: Yesterday we left Gibraltar for Cherbourg, France. Its population is around 44,000. I noticed the people of this old province were mostly tall, fair-haired and blue-eyed. They are among the most hardy and industrious inhabitants of France.—Frances.

As indicated in the last selection from the diaries, the cruise returned to Gibraltar upon the completion of the tour and from there sailed up the western coast of Spain and on to Cherbourg. The group spent a short time here and then crossed to Southampton, England, when they finally boarded the *Carinthia* for the homeward journey. After leaving the Mediterranean behind, there was an actual period of depression, though brief, in which everyone seemed to be at a loss as to how to make a quick adjustment to a routinized procedure.

Looking back over the project and summarizing the actual results, the teacher feels that certain definite learnings were successfully carried out.

In the consideration of primary learnings, the factual objectives have been discussed above. The knowledges are those that would come to an observing traveler who might select the same cruise. Chief among the mechanical skills developed was the ability to use numerous books, magazines, and other reading materials quietly, quickly, and understandingly. Likewise, the methodical writing of notes in the diaries brought about the ability to make brief, clear statements which, though concise, were complete in handling the subject matters. Among the habits developed were: (1) talking definitely and to the point in oral work when acting as a guide; (2) asking pointed questions; (3) using new words added to the vocabulary both in writing and speaking; (4) using complete sentences at all times.

The secondary learnings in this project were numerous. The more important of these were: (1) the beginning of a stamp and coin collection; (2) the study and construction of types of ocean liners by the boys; (3) a consideration of the influence of European architecture upon American buildings; (4) considerable research work on the part of one group of children who desired an historical background for the places visited; (5) a collection of pictures of artistic masterpieces.

By far the most worth while were the concomitant learnings which this project called forth. These were: (1) a desirable set of personal attitudes; (2) courteous consideration for all associates in the work; (3) an interested, happy attitude toward the subjects of study as well as toward school itself; (4) an attitude of respect for one's self in all matters where pride, self-respect, and responsibility were concerned; (5) a sincere appreciation for all things artistic; (6) a more tolerant feeling toward the people of other nations; (7) a keener desire for high standards of workmanship whether it be neatness, accuracy, or carefulness; (8) a deeper appreciation of the value of American citizenship.

Thus, today, the children look back with

special pride upon that piece of work and a touch of realism always creeps into their conversations when their Mediterranean cruise is mentioned. Maurice well expressed the group's feelings when he said, "I wish we could always study geography this way."

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GUESSING AND SUCCESS ON THE TRUE-FALSE TEST

The true-false test is classified as one of the new written test types among which are the completion, the best answer, the multiple response, and matching exercises. Stock arguments used in favor of these tests, as opposed to the old essay type of test, are: (1) the increased reliability; (2) the greater objectivity; (3) the time taken to give the test; (4) time required to score it; (5) the ground covered; (6) saving the student's effort. On the other hand teachers and students have at times made these objections: (1) The new tests do not measure the most important outcomes of learning, such as a student's attitude toward the subject matter, or his originality, etc.; (2) their preparation is too time consuming; (3) they provide no training in organization and expression; (4) some of the tests appeal too much to memory; (5) they permit guessing. This last objection has been especially applied to the true-false test, and it is undoubtedly true, so various scoring techniques have been adopted to remove this factor, which should of course have nothing to do with a good test.

Possibly the best known way of scoring a true-false test rests upon the assumption that if a student misses ten out of seventy items, he has guessed at twice ten, or twenty, having had a fifty-fifty chance of guessing correctly throughout the entire test. His score then would be fifty, found by doubling the number of items wrong and subtracting that number from the number of items in the test, or just subtract the number wrong from the number right, this computation giving the same results. But does this, or other methods of scoring, really remove the chance of success on the test by guessing? This is the problem to be considered.

Each member of a class in high school methods composed of twenty-nine students, who were studying the new examinations at the time, made out a list of one hundred items, and marked each item true or false according to whether a tossed coin came up either heads or tails. About a week later a true-false test of one hundred items was given, intended to be a part of the course, and each student's score was paired off with the one he made by chance.

The scoring scheme, S equals R-W, in which S stands for score, R for the number of items right, and W for the number of items wrong, undoubtedly shows who is who. The best score made by guessing was 16, while three students made —12, the lowest score. When the real test was given, one student made a score lower than the best guessing of the previous exercise. The next highest score was eight points higher than the highest score in the chance arrangement. The three lowest scores of the real test were assigned marks of failure, thus getting far beyond possibilities of successful guessing as far as this method of scoring is concerned.

However, at the present time the formula, S equals R minus W over $N - 1$, in which S refers to score, R to number right, W to items wrong, N to all items, is possibly even more popular than the first mentioned method of scoring. According to this scheme, a student could make a score of approximately 57.6 by guessing, and the lowest made in all the guessing was

43.4. The penalty for guessing is not great enough, and may allow many to pass the test, if fortune smiles upon them, and the teacher is not on her guard for such contingencies.

A third method of scoring is to take the number of items correct, and to allocate the marks from this array of figures. This involves no guessing penalty, which, it is claimed, lowers the reliability of the scores, but we are always far from sure that guessing has not taken place. Guessing is a factor and must be taken into account. The student who made a score of 24 (by the second method of scoring) marked 62 items correctly, and failed on 38, makes a score of 62 by this third method, but it is too close to a guess to be a passing score. Of course, in the last analysis, whether the student passes or fails is a matter of the allocation of marks to the scores, and an arbitrary decision on the part of the teacher exactly where the boundary line of failure is. However, usually if the test is a good one the results reveal a rather decided division somewhere near the lowest 5 or 10 per cent of the class.

Recent studies[1] get at the problem by changing somewhat the nature of the test; that is, each statement is given in a negative way, and later on in the test in an affirmative way. No superiority of this paired true-false test over the straight true-false test is claimed, but a direct method of taking the guessing into account is provided for. However, this new method complicates the situation somewhat, and, as the authors of it have themselves pointed out, it needs further investigation and experimentation before its real value is definitely known.

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[1] Christensen, A., "A Suggestion as to Correcting Guessing in Examinations." *Journal of Educational Research*, 12: 370-374 (December, 1926).
Greene, H. A., "A New Correction for Chance in Examinations of Alternate-Response Type." *Journal of Educational Research*, 17: 102-107 (February, 1928).

AS REPORTED

THE EDUCATIONAL REVIEW COMBINED WITH *SCHOOL AND SOCIETY*

In the issue for November 3 of *School and Society* appears a section called "The Educational Review," by William McAndrew. This marks the termination of the publication of *The Educational Review* as a separate magazine. Hereafter Dr. McAndrew will edit one section of *School and Society* in the first number of the month.

The passing of *The Educational Review* is of more than ordinary interest. Founded over twenty years ago by Nicholas Murray Butler, it has long occupied an important place among the professional magazines. As has been said, what the *Atlantic Monthly* is commonly thought to be among magazines for general reading, *The Educational Review* has been among periodicals for educators. Dr. McAndrew, after he became the editor, impressed on it his unique personality and made it not only informing but also highly entertaining. It is a matter for congratulation that through the medium of *School and Society* he will have the opportunity of continuing to present his spicy comments upon educational events and entertaining reviews of new books.

PROGRAM OF THE NINTH ANNUAL MEETING OF THE CONFERENCE

The ninth annual meeting of the National Conference of Supervisors and Directors of Instruction, formerly the National Conference on Educational Method, will be held in Cleveland, Ohio, February 26 and 27. There will be two sessions and a luncheon.

The first program—that on Tuesday morning—will be devoted to the topic, "Next Steps in Supervision." The program on Wednesday morning will be given over to a discussion of the Second Yearbook of the Conference, prepared by Professor L. J. Brueckner and his committee on "Scientific Method in Supervision." The yearbook is made up of twenty-two chapters devoted primarily to the exposition of newer and more objective techniques in the study of teaching. The yearbook will be ready for distribution shortly before the convention. Both of these meetings will be held in the Hollenden Hotel.

On Wednesday at noon there will be a luncheon for members only at the Statler Hotel. Dr. Burton of the University of Chicago and Dr. Morrison, Assistant Commissioner for Elementary Education in the State of New York, will speak. Afterward there will be a discussion of the policies of the Conference. Members should be sure to bring with them their cards showing that dues have been paid for the current year. Reservations should be made in advance; the price is two dollars per person. Address the Secretary-Treasurer of the Conference, Dr. James F. Hosic, 525 West 120th Street, New York City.

The most important business to come before the Conference at this time will be the question of final vote of confirmation of the affiliation of the Conference with the National Education Association. In accordance with a resolution passed at the meeting in Cambridge in February, 1928, a petition was circulated requesting that the Conference be made a regular department of the National Education Association. Four hundred signers were secured. The petition, together with a revision of the constitution to adapt it to the general policies of the parent organization, were submitted to the Executive Committee of the

National Education Association at the meeting in Minneapolis in July. The petition was unanimously accepted, subject to a further vote of confirmation after the final action of the Conference itself at its next annual meeting.

Five members of the Board of Directors will be elected at the meeting on Wednesday morning to take the place of the following members, whose terms expire: A. S. Barr, W. H. Burton, W. S. Gray, Worth McClure, and Mabel E. Simpson.

The constitution as revised for membership in the National Education Association appears below, together with the programs for the Tuesday and Wednesday morning sessions in full. All members of the Conference will receive additional notices of the meeting through the mail.

PROGRAM OF THE NINTH ANNUAL MEETING OF THE CONFERENCE

Tuesday, February 26

Assembly Hall, Hotel Hollenden, 9:30 A. M.

MARY A. S. MUGAN, President of the Conference, presiding

Topic: Next Steps in Supervision

1. From the Standpoint of the Elementary Supervisor
   JULIA L. HAHN, Director of Kindergarten and Primary Grades, San Francisco
2. From the Standpoint of the Elementary School Principal
   ARTHUR S. GIST, Principal of Training School and Director of Practice Teaching, State Teachers College, San Francisco
3. From the Standpoint of the Supervisor of Rural Schools
   I. JEWELL SIMPSON, Assistant State Superintendent of Schools in Maryland
4. A Balanced Program of Supervision
   JAMES F. HOSIC, Professor of Education, Teachers College, Columbia University, New York

[1] Note the earlier hour at which this session begins.

Wednesday, February 27

Assembly Hall, Hotel Hollenden, 9:00 A. M.[1]

MARY A. S. MUGAN presiding

Topic: Scientific Method in Supervision as Presented in the Second Yearbook of the Conference

1. Introduction and Presentation of the Yearbook
   LEO J. BRUECKNER, Professor of Elementary Education, University of Minnesota
2. Teachers' Difficulties as a Basis for Supervision
   DOUGLAS WAPLES, Graduate Library School, University of Chicago
3. Survey Techniques for the Experimental Determination of the Values of Materials and Methods
   PAUL T. RANKIN, Director of Research, Detroit Public Schools
4. Teacher Participation in Curriculum Construction
   PRUDENCE CUTRIGHT, Director of Instructional Research, Minneapolis Public Schools
5. Appraisal and Summary—Suggested Uses for the Yearbook
   ERNEST HORN, Professor of Education, State University of Iowa

LUNCHEON MEETING

Wednesday, February 27

Lattice Room, Hotel Statler, 12:00

A. S. BARR, First Vice President of the Conference, presiding

Informal addresses by

MARY A. S. MUGAN, President
JAMES F. HOSIC, Secretary-Treasurer
WILLIAM H. BURTON, Member of Executive Committee
J. CAYCE MORRISON, Member of Executive Committee

It is planned to make this a family gathering for members of the Conference, for the discussion of policies and future plans of the organization. Admission by *membership card only*, in addition to luncheon ticket.

CONSTITUTION OF THE DEPARTMENT OF SUPERVISORS AND DIRECTORS OF INSTRUCTION OF THE NATIONAL EDUCATION ASSOCIATION

ARTICLE I

Name.—The name of this organization shall be the Department of Supervisors and Directors of Instruction of the National Education Association of the United States.

ARTICLE II

Object.—The object of the Department shall be the improvement of supervision and teaching.

ARTICLE III

Membership.—Section 1. There shall be two classes of members: active and honorary.

Sec. 2. Any person who is desirous of promoting the interests of the Department and sharing in the results of its work shall be eligible to membership and may become a member by paying the annual dues, provided his application for membership shall have been approved by the Executive Committee of the Department. All members of the Department must also be members of the National Education Association of the United States.

Sec. 3. Active members shall be entitled to vote, to hold office, to participate in discussion, and to receive all the publications of the Department.

Sec. 4. Honorary members shall be entitled to all the privileges of active members, with the exception of voting and holding office, but shall be exempt from the payment of dues. A person may be elected to honorary membership by vote of the Department at the annual meeting on nomination by the Executive Committee.

Sec. 5. The annual dues of active members shall be four dollars.

ARTICLE IV

Officers and Directors.—Section 1. The officers of this Department shall be president, first vice-president, second vice-president, secretary-treasurer, and executive committee.

Sec. 2. The Executive Committee shall consist of the president, the first vice-president, the second vice-president, the secretary-treasurer, and three other active members of the Department.

Sec. 3. The president and vice-presidents shall serve for a term of one year, the secretary-treasurer for three years, and the other members of the Executive Committee for three years, one to be elected each year.

Sec. 4. The Executive Committee shall have active charge of the affairs of the Department, subject to the approval of the Board of Directors.

Sec. 5. The Board of Directors shall constitute the governing body of the Department. It shall consist of fifteen members, whose term of office shall be three years, five to be elected each year at the annual meeting in such manner as the by-laws of the Department may determine.

Sec. 6. The Board of Directors shall elect from their own number the officers of the Department, who shall serve also in like capacity as the officers of the Board. The Board shall be the custodian of the property of the Department, shall have power to make contracts, and shall make an annual financial report to the Department.

Article V

Sections.—In order to provide for the special interests of different types or classes of supervisors, the Department shall maintain sections and arrange for section meetings. Applications for sections shall be made to the Board of Directors and, if approved by the Board, shall be submitted by it to the annual meeting for confirmation. Sections may be discontinued in the same way.

Article VI

Meetings.—The Department shall hold two regular meetings each year, one in connection with the annual meeting of the National Education Association and the other in connection with the annual meeting of the Department of Superintendence. Special meetings may be called by the Executive Committee. The annual meeting for the election of officers, presentation of reports, and transaction of any other business requiring official action by the Department or by the Board of Directors shall be the regular meeting designated for these purposes in the by-laws of the Department.

Article VII

Publications.—The Department shall publish a journal and such supplements and reports as the Executive Committee may direct.

Article VIII

Amendments.—This constitution may be amended at any annual meeting for the transaction of official business by a vote of two-thirds of the active members present, provided notice of proposed amendment has been given in the journal of the Department at least three months previous and provided further that nothing in the proposed amendment shall conflict with the Act of Incorporation or the by-laws of the National Education Association.

Article IX

By-laws.—Details of the activities of the Department shall be regulated by the by-laws. These may be amended at any annual meeting for the transaction of official business by a majority vote of the members present, provided notice has been given three months in advance.

By-Laws

Annual Meeting.—The regular meeting, to be known as the annual meeting, for the election of officers and members of the Board of Directors and for the transaction of business shall be that held in connection with the annual meeting of the National Education Association, provided that proposals may be made and agreed upon at the winter meeting, needing only to be confirmed at the annual meeting.

Elections.—Unless otherwise ordered by the Department, nominations of officers of the Department and members of the Board of Directors shall be made by a committee chosen by the Executive Committee of the Department.

Quorum.—Twenty-five active members of the Department shall constitute a quorum for the transaction of business. Eight members of the Board of Directors shall constitute a quorum of that body.

Committees.—Standing committees of the Department may be appointed by the Executive Committee, which shall have general oversight and direction of all such committees.

Publications.—The publications of the Department shall be in charge of the Executive Committee, subject to such general policies as the Board of Directors may adopt. All publications shall be edited by the Secretary-Treasurer of the Department.

Expenditures.—The funds of the Department shall be disbursed only in accordance with annual budgets adopted by the Board of Directors. The Secretary-Treasurer shall receive and disburse the funds of the Department and make an annual accounting to the Board of Directors under the direction of the Executive Committee, which shall be responsible for proper auditing of accounts.

Membership Year.—The period of membership of each person who joins the Department and pays the annual dues shall be twelve calendar months, counting from the first day of the month in which the person is accepted as a member. Members shall be entitled to receive only those publications of the Department that appear within the year for which their annual dues are paid.

MEASURING THE EFFECT OF INDIVIDUALIZATION

The school authorities of Detroit are making what promises to be a very important study of the problem of adapting the school to individual differences. The attempt is to measure the effectiveness of various degrees and kinds of individualization. The plan consists of a trial under experimental conditions of six different procedures, namely, (1) much individualization, (2) some individualization (horizontal grouping by *XYZ*), (3) little individualization or mass instruction, (4) the Winnetka Plan, (5) the Dalton Plan, and (6) vertical grouping by *XYZ*.

Thirteen schools in all are coöperating in the experiment—two schools for each of the first five types of procedure and three for the sixth. A preliminary trial of the new order was made in the semester beginning with February, 1928. During this time necessary materials were prepared and teachers and pupils were made moderately familiar with the activities involved. The experiment proper is planned to continue from September, 1928, through June, 1929.[1]

PROGRAM OF ELEMENTARY SCHOOL PRINCIPALS AT CLEVELAND

Two sessions of the Department of Elementary School Principals of the National Education Association will be held at Cleveland. The general topic is, "How Can the Elementary School Principal Better Serve Our Public Schools?" The speakers at the meeting on Monday afternoon, February 25, will be: Miss Bessie Bacon Goodrich, Assistant Superintendent of Schools, Des Moines, Iowa; Professor Robert B. Binnion, of the Peabody College for Teachers; and Professor James F. Hosic of Teachers College, Columbia University. The speakers at the second session, on Wednesday afternoon, February 27, will be: Professor W. H. Burton, of the University of Chicago; Miss Amelia Meissner, Curator of the Educational Museum, St. Louis; and Miss Sarah Horton, Principal of Tremont School, Cleveland. The annual banquet will be held on Tuesday evening at seven-thirty, in the ballroom of the Statler Hotel.

[1] A complete account of the Detroit Individualization Study is being presented in the *Detroit Educational Bulletin* from month to month. The first installment appeared in March, 1928.

THE READER'S GUIDE

THE PROFESSION OF RESEARCH

A recent bulletin of over three hundred and fifty pages, published by the University of Illinois, presents impressive evidence of the development that educational research has made in a single decade.[1] From it one may discover at a glance how widespread provision for scientific investigation has become in bureaus connected with systems of public schools, in university schools of education, and in other institutions. It is an impressive showing. Besides this one is treated to a survey of research accomplished or in progress, with especial attention to educational measurement and curriculum, in the "pioneer" period and the decade from 1918 to 1927. Topical indexes are provided, an exhaustive bibliography is included, and for good measure a list of doctors of philosophy in education containing one hundred and fifty-three entries is appended. The whole constitutes an indispensable handbook in its field and is itself a good example of its theme.

Educational research has, it seems, become an art calling for statements of appropriate theory to guide it. At least two books to serve as guides to research in education have recently been published.[2] Both profess to be the outgrowth of graduate work in which the need of better training in the methods of investigation became apparent. The first claims also to be based upon a careful study of problems presented by a large number of students themselves.

Space permits only brief exposition rather than attempt at *critical* evaluation. In any case, these volumes are so welcome that anything but a warm reception for them would be ungrateful. Both are intended to be used as textbooks and are planned and equipped in current fashion.

Professor Crawford comes more quickly to Hecuba. He takes for granted that the reader is already convinced of the importance of research and wishes to begin at once upon the problems involved in pursuing it. Such a reader will skim or omit the first four chapters of Professor Good's treatment and he would probably be acting wisely in doing so. The tendency to take nothing for granted in books as well as courses in education has resulted in a degree of repetition that advanced students in education increasingly and very properly deplore. Since the first book is considerably larger than the second, it has an initial advantage in scope and thoroughness of handling. Thus Professor Crawford displays seventeen chapter headings on technique as against Professor Good's eight. The difference is, however, less than that statement suggests; what one writer presents as a chapter the other treats as a section. The total number of topics touched upon does not evince so much variation as the organization and the emphasis.

A more striking difference is in documentation. Professor Good resorts frequently to footnotes and quotations from "authorities." Professor Crawford avoids these almost altogether. His bibliographies, too, are comparatively scanty. From

[1] "Ten Years of Educational Research." By Walter S. Monroe and others. *University of Illinois Bulletin*, August 21, 1928.

[2] *The Technique of Research in Education.* By Claude C. Crawford, University of Southern California, 1928. *How to Do Research in Education.* By Carter V. Good. Warwick and York, 1928.

this point of view the second book is the more scholarly. The fact that this book also contains no exercises for students and that the references recommended are printed in a single list at the end indicates that it was designed more particularly as a constant handbook and less as a guide to daily class work than the other. It will, at any rate, appeal to a somewhat different type of instructor. Since instructors are notoriously unlike in their methods, this is a good thing.

Of course these two handbooks will not long lack company. Indeed a series edited by Professor McCall already begins to bid for patronage.[3] The initial volume is called *Check Lists for Educational Research* and was prepared by Harold H. Bixler. Much more condensed than the two handbooks just mentioned, this little book of about a hundred pages covers essentially the same ground. The name is derived from the method, which is that of brief numbered statements, one hundred and fifty-seven in all. By means of these the investigator is supposed to check his plans and procedures. The manner in which the lists were derived, namely, by analysis of doctoral dissertations, is briefly explained and by means of tables their validity is vouched for. An extensive bibliography completes the equipment. The book professes to be a handbook but will lend itself to class work as well. Many will prefer it to a text cast in the form of discussion.

From Ohio State University comes a monograph somewhat similar to that of Monroe.[4] This is a doctor's dissertation and deals with the work of bureaus of research. The author begins at the beginning, not neglecting the work done in foreign countries, and offers to directors of bureaus a large body of historical information as well as a directly useful account of current practices.

In addition three bibliographies are available. That of Professor Alexander pertains chiefly to administration.[5] The entries are classified and annotated and they are coupled with a discussion of the nature of research in this field, the choice and outlining of a problem for a dissertation, and the actual writing of it. The references are to source, the finding of which is explained. Messrs. Monroe and Engelhardt essayed a similar task but more general in scope.[6] The third set of references comes from the United States Bureau of Education. This is a mimeographed report of research studies under way during 1927-28, dated March, 1928, together with a supplementary list as of May 1. Each entry is annotated. The Bureau plans to compile such lists each year.

THE YEARBOOKS

A good deal of useful material is to be found in the current yearbooks. The number of them is increasing but at the same time their boundaries are slowly being defined, so that one may pick and choose. The psychologically inclined will turn to *Nature and Nurture*,[7] the twenty-seventh annual compilation of the National Society for the Study of Education. This is in two thick volumes but is not so heavy as it looks. The conflict over the relations of heredity and environment is always exciting, and although the latest may fairly be said to end in a draw, there is much to be learned by reading of the experiments carried on and from following the discussions

[3] *Standard Research Procedures.* Edited by William A. McCall. Teachers College, Bureau of Publications. Two numbers issued.
[4] *Organized Research in Education.* By Harold B. Chapman. Ohio State University Press, 1927.
[5] "The Techniques of Educational Research," *University of Illinois Bulletin*, Jan. 10, 1928.
[6] *Educational Research.* By Carter Alexander. Teachers College, Bureau of Publications, 1927.
[7] Public School Publishing Company, Bloomington, Ill., 1928.

and representations of the opposing schools of thought.

A further report from the Commission on the Curriculum occupies the Sixth Yearbook of the Department of Superintendence. This is entitled *The Development of the High School Curriculum,*[8] but is in fact something of a miscellany. It treats of school counselling, "extra-curricular" activities, the senior high school teacher, health and physical education in junior and senior high school, the relationship of high school to college, as well as curriculum problems themselves. One of the major parts of the report is devoted to research studies.

The April bulletin of the Department of Elementary School Principals constitutes the seventh yearbook. This is a "bulletin" of 638 pages, devoted chiefly to the report of a Committee on Standards and Training for the Elementary School Principalship. The report is both comprehensive and detailed. No comparable study has ever been made of any school office. All the research so far done on the subject has been collected, digested, and reported. Extensive original investigation was carried on by the Research Bureau of the National Education Association and a series of recommendations were formulated in the light of conditions as they exist. The completed work will undoubtedly do much to improve the status of the principalship.

The Department of Classroom Teachers calls its third yearbook *Problems and Opportunities in Teaching.*[9] The title is an ingenious attempt to suggest unity where little real unity exists. The compilation is nevertheless significant as an expression of the serious professional interests of the largest single group of educational workers. It reflects in large measure the contacts of the president of the department made in the course of extensive visitation of schools and reflects widely separated "high spots" in the work of classroom teachers.

Educational Supervision is announced as the First Yearbook of the National Conference on Educational Method.[10] This organization is now semi-officially a department of the National Education Association, awaiting only certain formalities. Meanwhile it bears the name, National Conference of Supervisors and Directors of Instruction. Its first annual is also somewhat general, though well organized and with the exception of one or two chapters devoted to topics in which supervisors may be expected to have the chief but by no means the exclusive interest. The main headings are organization, training and activities, technique, and philosophy. Since philosophy has concerned itself almost exclusively with education in general or with teaching, its application to supervision is of more than ordinary significance. The volume as a whole lays a good foundation for the more specific studies to follow.

The annual of the National Society of College Teachers of Education contains nine chapters on college teaching. It records the opinions of alumni and students, reports an experiment on individualized instruction, describes techniques in selecting content for professional courses, and ends with a bibliography on methods.

Of the yearbooks issued by local organizations, those of the Chicago Principals' Club appear to be most worthy of notice. The third is designated "The Second Cooperative Report of the Studies of Curriculum and Supervision." The curriculum committee offers six and the supervision committee, two studies. Reading, arithmetic, work with the deaf, reorganization of the kindergarten, junior high school pro-

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grams and the factors that characterize superior teachers are all dealt with in more or less specific and definite fashion. The whole reflects credit on the professional zeal and scientific interest of this group of principals.

The yearbooks of the National Council of Teachers of Mathematics now number three.[11] The first was a survey of progress, the second had to do with curriculum problems, the third presents "Selected Topics in the Teaching of Mathematics." The work might fairly be called a series of authoritative discussions. There is little of research or systematic report of individual experiences, yet no other comparable organization is at present providing its members with so useful an annual, if indeed any is provided at all. It speaks well for the support that mathematics teachers are giving to their organization that such a volume is possible.

J. F. H.

A BOOK OF STUDY FOR THE COLLEGE FRESHMAN

One of the bewildering things about being a college freshman is the feeling of freedom which results from the greater measure of independence both in choice of courses and in methods of study which is granted to college students. Many colleges have introduced orientation or how-to-study courses to help the freshman to solve some of his difficult study problems. Professor Crawford's new book[12] is an attempt to put into textbook form the methods of successful college study. From the standpoint of modern psychology the suggestions in the book are entirely sound, and many practical ideas are introduced. The reviewer finds himself in doubt, however, as to the extent to which many of the general principles which are enunciated and discussed by the author can be applied to specific study situations. The whole process of accepting a general principal and then of analyzing its applicability to a particular situation is an extraordinarily difficult one. For example, on page 131 the first paragraph is as follows:

"Define the problem. All thinking originates in a problem, a doubt, a perplexity, or a difficulty. If you have no choice or decision to make, or no goal to reach, or no obstacle in your path, you do no thinking. In other words, you think only when you have to. The quality of your thought life depends upon your ability to discover and to define problems. The poor thinker does not see the problem until it is immediately before him, and even then he does not know exactly of what it consists. The good thinker sees the problem more quickly and particularizes, or localizes, or defines it exactly and precisely, then proceeds to attack it with a definite plan of procedure."

All of this is, of course, absolutely sound, but let us say that a student is studying the Franco-Prussian War. Is it not a matter of doubt as to whether the average college freshman would be able to say just what form of procedure would be necessary in order that the suggestions in this paragraph might be carried out?

If the book were used as a text in an orientation class where the instruction took the form of showing the application of each paragraph to specific study questions, the book would undoubtedly prove of considerable worth.

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SIGNIFICANT ARTICLES

NATIONAL PROGRAM OF PARENT EDUCATION

In *School Life* for November Miss Martha S. Mason, vice president of the National Congress of Parents and Teachers, outlines at some length the program of that organization in the education of parents. After touching upon the history of the society, Miss Mason points out that the new emphasis upon the education of parents is a return to the principles of the founders. The activity is not to be confined entirely to mothers but seeks to interest both parents in studies in child welfare. The most important agency to this end is the summer round-up. Others include the periodical, *Child Welfare,* the work of committees, and the development of degree-giving courses. What the society seeks to encourage is the establishment of homemaking courses in the universities.

"SANCTIFIED SQUANDER"

Of the many interesting titles of articles in the *Journal of the National Education Association* for November. "Sanctified Squander," by Superintendent R. G. Jones of Cleveland, is the most striking. The article is a reply to a pamphlet bearing this heading, in which an attack was made upon the policies of the Cleveland schools. Mr. Jones states that although the pamphlet was widely distributed in the city of Cleveland, it has apparently been taken much more seriously elsewhere. He reveals a series of facts to show that so far from being on the defensive, the authorities in Cleveland are entirely justified in making a good offensive. Conditions in public education have changed to a remarkable degree in the last two decades and hence the standards of expenditure of an earlier period are entirely inapplicable to the situation as it exists today. The public is abundantly able to pay for the schools as much as it is now doing, and will be willing to expend still greater sums when the need is made apparent.

THE PASSING OF THE RECITATION

One of the most suggestive of the recent books in Education is called *The Passing of the Recitation,* by Mr. B. T. Thayer, of the Ethical Culture School in New York. Writing under this head in the *Journal of Education* for November 19 and 26, Mr. Thayer explains that the starting point of his discussions was found in a topic emphasized at the last meeting of the Department of Superintendence, namely, "Where Shall We Go for our Educational Assumptions?" Since education is primarily an applied science, it must necessarily take an appropriate hypothesis from related fields. One of the most important of these is psychology, but ideas drawn from this source must be checked by those derived from many others. Supervised study and individual instruction, for example—both outgrowths of recent scientific educational psychology—have tended to ignore equally scientific factors in learning. Close scrutiny of the socialized recitation and the project method reveals, likewise, contributions to educational method that destroy other important considerations. What is needed is a well-balanced consideration of all the factors involved in order that new educational movements may not become one-sided.

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and individual men and women of genius such as Stanley Hall and John Dewey.

"The scope of the scientific study of the curriculum is very wide, including substantially everything about what is to be learned, everything about what use the learners are to make of it, and everything about how they learn it." These phases of the topic were explained and illustrated in detail.

The speaker concluded by saying that "we may properly be very optimistic concerning the use of the scientific spirit and scientific methods in the study of the curriculum. In the few years of their operation they have already done useful service. . . . Less and less every year the curriculum will be based on the traditions of the multitude or the personal prestige of some reformer. More and more it will be the product of our laboratories and experimental schools, certified by experts."

PRESENT STATUS OF MEASUREMENT AND EXPERIMENTATION

Professor V. A. C. Henmon, of the University of Wisconsin, contributes to the *Journal of Educational Research* for October a very important paper called "Measurement and Experimentation in Educational Methods." After commenting upon the present tendency in education to take with the utmost seriousness the ideal of the exact science, "to measure that which is measurable and to render measurable that which is not," he remarks that this is undoubtedly a healthy attitude to take if education is to become a science, but that at the same time there is reason to be troubled "by the imperfections and ambiguities of our measurements and the inconclusiveness of our sporadic experiments." Enlarging upon this theme, Professor Henmon describes the current tendency to play up apparently justified conclusions, especially when they run counter to generally accepted notions. For example, we have been distinguishing sharply between intelligence tests as measures of capacity to do the things that lie ahead, and achievement tests as measures of what lies behind. Kelley has recently shown, however, that this is largely, if not entirely, a spurious distinction. Out of the welter of experiment and discussion pertaining to the transfer of training, we have only one important generalization, namely, that there is transfer so far as there are common or identical elements, and even this is challenged as vague, ambiguous, and useless. Although we are afflicted at present, however, with inadequate measurements, inconclusive experiments, and a realization of the complexity of our problems, we may look forward to better times ahead.

WHAT MAGAZINES DO PRINCIPALS AND TEACHERS READ?

In the *Elementary School Journal* for November appears a study by Messrs. E. Lowell Kelly and Frederick L. Whitney, of Colorado State Teachers College, of the reading of teachers and principals in professional magazines. The study was planned as a companion to that reported by LaPoe in the *Educational Research Bulletin* of Ohio State University for September 14, 1927. Among the data obtained were the titles of the magazines most frequently read by 250 elementary school principals and an equal number of elementary school teachers. These are compared with the results obtained by LaPoe's study of the reading of high school principals. The authors conclude that there is little in common in the lists of the elementary school principals and teachers as compared with the list of the high school principals. The reading of the elementary school principals is more homogeneous than that of either of the other groups.

Six magazines are common to the two

lists contributed by the principals, namely: *Elementary School Journal, Journal of Educational Method, Journal of Educational Research, Journal of the National Education Association, Normal Instructor and Primary Plans,* and *Primary Education-Popular Educator.*

Aside from organs of state teachers' associations, the only magazines read by all three groups are the *Journal of Education* and *Teachers College Record.*

From the standpoint of helpfulness, the high school principals prefer the *School Review;* the elementary school principals, the *Journal of Educational Method* and the *Elementary School Journal;* the teachers, *Normal Instructor and Primary Plans* and *Primary Education-Popular Educator.*

BEHAVIOR PROBLEMS OF YOUNGER CHILDREN

Childhood Education for November is devoted to various aspects of the general topic of "Behavior Problems." The leading article, by Professor Kilpatrick of Teachers College, sets forth a series of fundamental principles in pursuit of the general theme that tradition hampers us in working out a rational procedure in dealing with children. Among the hangovers are: emphasis on punishment; the belief that the principal motive that actuates people is hope of reward or fear of punishment; the tendency of parents and teachers to overmaster those under their care; and the separation of morals and religion from the rest of life. Some new and quite modern notions, moreover, are equally harmful, such as the attitude of "advanced" young people that morality is and of right ought to be quite out of date, and that modern psychology has so enthroned mechanism as to take away personal responsibility for conduct. There is also danger in the advocacy of absolute and unrestricted self-expression, and the restricting of the notion of learning largely, if not entirely, to habit formation. The discussion of conduct must take into account the philosophy of life assumed. The basis for character building is science, particularly biology. Modern psychology and modern philosophy must work hand in hand to provide the principles that shall guide in dealing with problems of adjustment.

CHARACTER TRAINING IN SCHOOLS

Four of the contributions of the *Bulletin of the Department of Elementary School Principals* for October deal with the general topic of character training. They are in the nature of concrete accounts of the actual programs of particular schools. Miss Cassie F. Roys of the Walnut Hill School, Omaha, describes the activities of student organizations. Mr. John J. Loftus of Public School No. 80, Brooklyn, outlines the program of his institution for carrying into effect the objective of proper use of leisure time as set up by the report on "cardinal principles." Miss Agnes Boysen of the Lyndale School, Minneapolis, shows the relation between character traits and good scholarship, while Miss L. Daisy Hammond tells how the patriotic pageant is used in the Patterson and Clark schools, Dayton, to build up ideals. Finally, Miss Josephine C. Forster of the Institute of Child Welfare, University of Minnesota, analyzes the activities of young children and shows how the problems of the preschool child may be met.

THE NEW BOOKS

How to Classify Pupils. By William A. McCall and Harold H. Bixler. New York: Teachers College, Bureau of Publications, 1928. Pp. 83. $1.00.

Problems and Opportunities in Teaching. Third Yearbook, Department of Classroom Teachers, National Education Association, 1928. Pp. 112.

The Psychology of the Adolescent. By Leta S. Hollingworth. New York: D. Appleton and Co., 1928. Pp. 259.

Current Problems in the Supervision of Instruction. By Hubert W. Nutt. Richmond, Va.: Johnson Publishing Co., 1928. Pp. 538.

Supervision and Teaching of Handwriting. By Joseph S. Taylor. Richmond, Va.: Johnson Publishing Co., 1926. Pp. 192.

Visual Instruction in the Public Schools. By Anna V. Dorris. New York: Ginn and Co., 1928. Pp. 481. $2.64.

The History of the American People. Second revised edition. By Charles A. Beard and William C. Bagley. New York: Macmillan Co., 1928. Pp. 732. Illus.

The Shady Hill Play Book. By Katharine Taylor and Henry C. Greene. New York: Macmillan Co., 1928. Pp. 168. Illus. $2.25.

City Stories. By Florence E. Matthews and Rebecca J. Coffin. New York: Macmillan Co., 1928. Pp. 101. Illus. $2.00.

The Modern Life Arithmetics. By John G. Fowlkes and Thomas T. Goff. New York: Macmillan Co., 1928. Book One, pp. 435; $.80. Book Two, pp. 402; $.76. Book Three, pp. 445; $.76.

Tangletrees. By Lillie Le Pla. New York: Thomas Nelson and Sons, 1928. Pp. 197. Illus. $1.00.

Pamela's Teddy Bears. By Mrs. H. C. Cradock. New York: Thomas Nelson and Sons, 1928. Pp. 185. $1.00.

Representative Short Stories. Edited by Amanda M. Ellis. New York: Thomas Nelson and Sons, 1928. Pp. 409.

The Study of Poetry. By A. R. Entwistle. New York: Thomas Nelson and Sons, 1928. Pp. 288.

Points of Style. By George Carver. New York: Thomas Nelson and Sons, 1928. Pp. 86.

The Book of Pets. By Laura Zirbes and Alice V. Keliher. Meadville, Pa.: Keystone View Co., 1928. Pp. 102. Illus.

Workers. By Laura Zirbes and Marian J. Wesley. Meadville, Pa.: Keystone View Co., 1928. Pp. 97. Illus.

The Story of Milk. Teacher's edition. By Laura Zirbes and Marian J. Wesley. Meadville, Pa.: Keystone View Co., 1926. Pp. 93. Illus.

Short Story Writing. By Mary B. Orvis. New York: Ronald Press Co., 1928. Pp. 291. $2.25.

Safety First Stories. By George I. Brinkerhoff and Celena Rowe. New York: Longmans, Green and Co., 1928. Pp. 186. Illus. $.88.

Modern Principles and the Elementary Teacher's Technique. By Charles E. Holley. New York: Century Co., 1928. Pp. 431. $2.00.

Your Children. By Muriel Wrinch. New York: Frederick A. Stokes Co., 1928. Pp. 251.

Readings for the Fifth Year. By William E. Grady and Paul Klapper. First Half, pp. 248. Second Half, pp. 250. New York: Scribners, 1928.

Readings for the Sixth Year. By William E. Grady and Paul Klapper. First Half, pp. 250. Second Half, pp. 250. New York: Scribners, 1928.

IN PAPER COVERS

Instructional Tests in Arithmetic. By Raleigh Schorling, John R. Clark, and Mary A. Potter. Yonkers, N. Y.: World Book Co., 1928. Fifth Grade, pp. 57. Sixth Grade, pp. 66. Seventh Grade, pp. 65. Eighth Grade, pp. 77. Teacher's Manual, pp. 24.

Working Manual of Original Sources in American Government. By Milton Conover. Baltimore: Johns Hopkins Press, 1928. Pp. 167.

Issues in the Social Studies. By Baldwin Lee. Lincoln School, Social Science Mon-

ographs, No. 3. New York: Teachers College, Bureau of Publications, 1928. Pp. 191.

Projects and Problems. A Practical Guide for Teachers. Chicago: W. F. Quarrie & Co., 154 E. Erie St. Pp. 68. $.50.

Directory of Psychiatric Clinics for Children in the United States. Second Edition, August, 1928. New York: Commonwealth Fund, 578 Madison Ave. Pp. 179.

Course of Study in Recreational Reading, Grades 4, 5, and 6. Minneapolis, Minn.: Instructional Research Department, Public Schools (W. F. Webster, Superintendent), 1928. Pp. 49.

Eighty-fifth Annual Report of the Detroit Public Schools. Detroit, Mich.: Board of Education, 1928. Pp. 160.

German Frequency Word Book. By B. Q. Morgan. New York: Macmillan Co., 1928. Pp. 87.

Proceedings of the Eighth Annual Session of the Ohio State Educational Conference. Columbus: Ohio State University Bulletin, Vol. XXXIII, No. 3, September 15, 1928. Pp. 591.

A Survey of the Public Schools of Shelbyville, Kentucky. Lexington, Ky.: Bulletin of the Bureau of School Service, University of Kentucky, Vol. I, No. 1, 1928. Pp. 191.

Fifteenth Annual Conference on Educational Measurements. Bloomington, Ind.: Bulletin of the School of Education, Indiana University, Vol. IV, No. 6, July, 1928. Pp. 73.

Fifth Annual Conference on Elementary Supervision. Bloomington, Ind.: Bulletin of the School of Education, Indiana University, Vol. V, No. 1, September, 1928. Pp. 54.

Work That is Play. The Pupil's Workbook in Reading. By Lura M. Eyestone and Clare W. Roberts. New York: Ginn and Co., 1928. $.56. Construction Pages, $.24.

Curriculum Bulletins, Raleigh (N. C.) Public Schools, 1928: No. 2, *Statement of the Aims and Educational Program of the Raleigh Public Schools.* No. 3, *Teaching in First Grade.* No. 4, *Teaching in Grades 2 and 3.*

English Exercises. By Thomas R. Cook. New York: Scribners, 1927. Pp. 55.

Triennial Report of the Public Schools, 1924-1927. Seattle, Wash.: Board of Directors, 1927. Pp. 167.

A Manual of Family Sewing Machines. Specially prepared for students in schools and colleges. New York: Singer Sewing Machine Co., Inc. Pp. 48.

Moral Situations of Six-Year-Old Children as a Basis for Curriculum Construction. By Albert M. Carmichael. Iowa City: University of Iowa, Studies in Education, Vol. IV, No. 6. Pp. 104. $1.00.

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Professor of Education and Psychology at the Massachusetts State Normal School

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